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# SIMPLE

# FARM ACCOUNTS

BY

REX E. WILLARD



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# SIMPLE FARM ACCOUNTS

A TEXT BOOK AND GUIDE

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## PREFACE

This book has been prepared to meet the demands of practical thinking farmers and also to be used as a textbook in rural schools. It is hoped that the results of its study will be the basis of more profitable farming. It is desired to make it possible for both young and old to meet practical farm operation in an easy and businesslike way. Further, the book will show the simplest recognized method of record-keeping for farms for the purpose of studying the farm business and also for the purpose of making income tax returns. The second part of the book shows the forms used, and illustrative entries from an actual farm are presented.

Separate account books, following the outline here presented, may be secured from the Extension Division of the Agricultural College of North Dakota, in which the record of the business of any ordinary farm may be kept.



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## INTRODUCTION

The average farm business is not large enough to justify the employment of a bookkeeper. Nevertheless, on account of the fact that farm business is more complicated than almost any other, the necessity for records is very great. Nearly every business maintains complete records of its transactions in order that the relation of various items of expense to the income may be studied and any leaks or unprofitable operations may be stopped. Certain enterprises within the business may show decided profits or excessive losses over a considerable period of time and therefore it may be desirable to increase or decrease such enterprises.

Again, the relation of the combination of enterprises of any business must be fully known for it frequently happens that one or more parts of the business may be unprofitable while at the same time if these were discontinued even a greater loss to the entire business would be sustained. This is illustrated in some farming communities where dairying is conducted. A cost account study of the dairy industry sometimes shows a loss while the entire farm is operated more profitably with dairying included in the business than when it is left out. This is often due to better use of labor over the whole year which is required whether dairying is conducted or not.

The present organized effort on the part of the farmers of the United States to improve their position in business makes it necessary that every farmer know his own business, not in terms of estimates or general experience, but by cold facts which are matters of record. It is unthinkable that an industry that occupies the attention of one-third of our population shall continue to be handicapped by lack of definite information about the business, as has been the case in nearly every instance when farmers have appeared before various governmental or other commissions in their own interest. The beginning of improvement in any business must be made in the study of the business itself.

The time is here when the rights of the public are being considered in matters of production and distribution of products and it is time that the consumers of farm products are made aware of the economic and social conditions of the agricultural producers. What are their standards of living? How may these conditions be improved to become comparable with those of their city neighbors?

Some farmers cannot and others will not keep records of even the simplest kind. Others feel that they have not the time or are too tired at the end of the day to spend two or three minutes recording their business transactions. Those farmers who have tried to keep a record of their business in any kind of systematic way almost universally agree that they are able to make big improvements and savings by the use of their records.

The necessity of making income tax returns has compelled many farmers to begin record-keeping and there men find that they are making considerable saving in payment of taxes by the use of records; this is due to the fact that most farm sales are in larger quantities and are therefore not easily forgotten when no record is kept, while a large number of expenses are individually small and are easily forgotten unless record of them is made.

Many farmers feel that they know whether they have made a profit or loss during any year by their bank statements. This is not a true measure of profit or loss because there are often many items of expense that do not pertain to the farm, such as doctor's bills, expenses for pleasure trips, etc., which are paid from the same bank account. Further, there are often payments for various permanent improvements such as buildings, machinery and others, which are really not expenses but are capital investment. Keeping account of expenses by the use of check stubs is a step in the right direction but it is seldom that farmers summarize the year's business from them and determine actual profits or losses.

Any system of accounting that does not take into consideration quantities and values of material on hand at the beginning and end of the year (inventories) does not give a true measure of profit or loss. This is illustrated by the experience of the North Dakota farmer who calculated his income for 1920 in two ways, one by the use of inventories and the other by the "cash" method. By the former method he made a profit of \$720.00 and by the latter, using the same year's business records, he made a profit of \$2180. The decrease in prices during the year caused a big loss in value of material on hand at the end as compared to that at the beginning of the year, amounting to over \$1,500.00.

The man who learns to study and analyze his business today is the prosperous producer of tomorrow.



## PART ONE

### CHAPTER I. DEFINITION OF TERMS.

It should be clearly understood just what concrete accounting results are to be obtained in farm record-keeping. The first and perhaps the less important result is the summary for purposes of income tax reporting. The second is the necessary information for the study of the business itself in order to make improvements.

Income tax reports are made from the standpoint of the individual; that is, the net farm profit is the return for the use of capital and labor of the operator. The individual is the head of the family and manager of the business. The members of the family are dependents of the individual head and as such all the income of the dependents is his income. Thus, if wages are paid to members of the family who are dependents it is like taking money from one pocket and placing it in the other; therefore, the value of labor of the family and of the operator himself is not a deductible expense for income tax reporting. The same is true with respect to interest on investment and some other items.

On the other hand the net income of the farm as a business is determined from the standpoint of the investment and all values entering into its operation are considered as expenses whether paid for in cash or not. So far as crop or livestock production is concerned it makes no difference whether labor or other bills are paid or not; the values enter into the operation.

Thus, a study of the business with a view of making changes and improvements involves not only record of such transactions as are necessary for income tax reporting but also a number of other items. In the discussion of the various accounts the classification is indicated with respect to these two purposes.

For the purpose of making clear the matter which follows, certain terms of quite common occurrence are here defined in alphabetical order:—

**Accrual Basis of Reporting.** (See Income Tax, page 10).

**Appreciation.** This term is used in expressing gain in value due to growth or development. Young stock, such as colts or calves appreciate as they grow to maturity, i. e., to the age at which they are prime or highest in value. Appreciation as here used does not refer to gain in value due to advances in market prices.

**Capital Investments.** Expenditures made for permanent improvements are capital investments. Any payment made which merely changes the form of the investment is still capital. The purchase price of an animal or the cost of erecting a new barn represents capital investment.

**Crop Acres per Horse.** This is a measure of efficiency of operation.

When the total number of acres in crops on a farm is divided by the number of actual work horses (or equivalent if tractor is used) the result is "crop acres per horse". It is the equivalent in terms of labor per acre of the amount of work that one horse does in one year.

**Depreciation.** This term represents the loss in value due to use of an article or due to age beyond the maximum or prime value. A horse appreciates until it is about six years of age when it begins to depreciate. A building begins to depreciate at once following its construction.

**Enterprise.** This term is used to designate one part or division of the farm business, such as the production of wheat, corn, cattle, or hogs, etc.

**Family Labor.** The work on the farm done by members of the operator's family is called family labor and may or may not be paid for in cash. A sixteen-year-old son of a farmer may work on the farm and receive payment therefor; this is family labor and it cannot be included in the labor account for income tax reporting, but is included for studying the farm business.

**Farm Operator or Operator.** The individual that manages the farm is called the operator. He may be either man or woman, owner or tenant.

**Farm Price Method of Valuation.** This is the process of determining the value of any article or commodity on the basis of its worth on the farm. For certain things this is the market price less the cost of delivering to market. The price of wheat at the elevator may be \$1.50 per bushel; if it costs two cents to deliver a bushel of wheat to the elevator and sell it, the farm price is \$1.48.

**Farmstead.** That part of the farm area on which the buildings stand and the intervening space between them is the farmstead. It usually includes also the garden plot, small lots and sometimes windbreaks.

**Groceries.** As herein used the term, groceries, refers to that portion of the food used on the table which is bought for cash or is received in trade. It does not include cooking utensils, or food furnished by the farm or garden for table use.

**Gross Profits.** This term is used in making income tax returns and when the report is made on the accrual basis gross profits are determined as follows:—from the sum of the value of the crops, livestock, etc., on hand at the end of year, and all sales of crops, livestock, etc., is subtracted the sum of the value of the livestock, crops, etc., on hand at the beginning of the year, and the purchases of livestock, crops, etc., during the year; the result is gross profits. When income tax reports are made on the "cash" basis, gross profits are the difference between purchases and sales of livestock, crops, etc.

**Horse Labor.** This term is used to represent the work done by horses or mules. **Cost of Horse Labor** is found by determining the entire cost of keeping work horses for one year.

**Income Tax.** This is a tax collected by government which is based on the net income of the individual, but this does not necessarily correspond to

the net income from the farm. As the head of the family the individual operator is considered to receive all of the income of his dependents for income tax purposes. Thus it is that value of family labor, for instance, is not allowable as expense for this purpose. Accrual basis of reporting income tax includes not only receipts and expenses and depreciation but also inventories of property at the beginning and end of the year. The **Cash Receipts and Disbursements** method of making income tax returns includes only cash receipts, expenses and a certain amount of depreciation but does not consider inventories in any form.

**Inventory.** The invoice or list of property on hand is called the inventory; an inventory should be taken at the beginning and at the end of each business year. The inventory at the end of the year is the inventory for the beginning of the following year.

**Interest on Investment.** The percentage income on the capital invested in the business is the interest on the investment, and is found by dividing the net earnings of the business by the amount of the value of the land, buildings, equipment, livestock and other personal property used in the business.

**Labor Earnings of the Operator.** This is the amount which the farm operator receives for his year's work after deducting all values entering into production and interest on investment. This is sometimes called "labor income."

**Management.** Every successful business requires supervision and this is generally called management. The value of management is properly an expense in determining interest made on the investment. It is not a proper charge, however, for income tax reporting. This charge varies from about \$200 per year on small farms to more than \$2500 per year on some large farms.

**Man Labor.** All farm work done by human hands, including that of men, women and children, is called man labor.

**Net Farm Profit** for income tax reporting, is the profit of the individual operator, no deductions having been made for the value of his own labor, living expenses, interest on investment and some other items.

**Nurse Crop.** When two crops are planted on the same land and no return is expected from one of them until after the year of planting, the other is called a nurse crop. Where sweet clover and wheat are planted together, wheat is the nurse crop.

**Overhead Expense.** Those costs which apply to the general up-keep of the farm are called overhead expenses. They are not applied directly to productive enterprises. Such cash items as telephone rent, interest on borrowed money, expenses for trips in the interest of the farm business, etc., are in this class. These are proper items to appear in the records for income tax reporting. There are many items of overhead expense on the farm which are not paid for directly in cash, such as those for general repair, etc.

**Permanent Improvements.** Those items of investment which increase the value of the property or extend the period of its usefulness materially are permanent improvements as distinguished from repairs. The latter merely maintain the property in ordinary condition. A new concrete floor in a barn is permanent improvement while fixing a door which has been broken is repair. There are some kinds of expenditures, however, which are near the border-line between repairs and permanent improvements; in such cases it is necessary for the accountant to use his best honest judgment as to which is repair and which is permanent improvement.

**Receipts per Cow.** When the total income from cattle is divided by the number of mature cows the result is receipts per cow. The increase in value due to the growth of young stock together with the receipts from the sale of stock and various products comprise the total income from the cattle.

**Size of Business.** The size of a farm may be measured by the number of acres in crops where the amount of stock is small. Where the farm is diversified in character, i. e., where there are several enterprises such as wheat, potatoes, and different classes of stock, the amount of labor required to operate the farm is a more accurate measure of size. Where possible to determine it the total expense of operation is a good measure. A farm that produces wheat, potatoes, hogs and cattle is larger than one producing grain only, even though the total farm acreage may be the same.

**Taxable Year.** For the purpose of income tax reporting the taxable year is a period of twelve months. It is usually from January 1 to December 31, although, if there is any particular reason for a different period of twelve months, any farmer may keep his record accordingly. After once establishing a taxable year between certain dates the farm operator should not change to another period.

## CHAPTER II.

## CLASSIFICATION OF ACCOUNTS.

The system of farm accounts herein described is entirely of a single entry form; each entry is made once and once only. No posting is required. Each of the accounts commonly used is labeled with a thumb index in the separate account book herein recommended so that each account can be easily found.

The only transfer of figures required is in carrying the totals of the various accounts to the proper places in the summaries. Each of the summaries shows the page-and column-number from which each total is transferred. It only requires that the directions be followed for the successful keeping of the records of the ordinary farm.

The various accounts essential for determining the facts concerning the farm business may be grouped under five general headings as follows:—

1. Capital Investments.
2. Expenses
3. Receipts.
4. Summaries.
5. Measures of Efficiency.

**Capital Investments.** These may be divided into two general classes, namely, real estate and personal property. The first of these comprises land and everything of a permanent character, that stands upon it, including buildings, timber, windmills, etc. Personal property includes all of the portable equipment, livestock, etc., used in farm operation. In detail, personal property includes the following:— cash required for operation; grain, seed, feed and supplies on hand; horses (or mules); cattle; hogs; sheep; poultry; machinery; harness and other loose equipment.

**Expenses.** These are divided into various accounts in conformity with income tax regulations and to meet the convenience of the farmer in recording the various items. Among the expense accounts are the following: feed bought; hired labor; family labor; machinery expense; tractor account; automobile account; groceries; value of food furnished by the farm; building repairs; household and personal expenses and miscellaneous farm expenses.

**Receipts** are classified in a similar manner to expenses, the following being included:—crop sales; dairy sales; egg sales; miscellaneous receipts.

For convenience in recording, certain items of purchase and sale are included in the same account, among them being those for cattle, hogs, horses, sheep and poultry.

**Summaries** are the accounts to which the totals of the various detailed records are forwarded for different purposes. The forms for income tax reporting (pages 87 and 89) are one each for the accrual basis and cash

receipts and disbursements' basis of reporting. One summary form (page 93) is for calculating the farm profits from an investment or production standpoint.

**Measures of Efficiency** are certain standards of operation by which methods and practices on one farm may be compared with the same methods and practices on another. Some standards or measures for approximately average farms of the northwest are indicated (page 97) with which any farmer may compare his own methods and determine his efficiency in comparison with others.

## CHAPTER III.

## CAPITAL INVESTMENTS.

**Real Estate** is usually the largest item of farm investment. For the purpose of determining the total investment (page 93) the value of the buildings must be included with the land value. The value of the farm is established on the basis of current selling prices of property of similar character. Among the conditions entering into a determination of farm property values may be included the following:—character of buildings; quality of the soil; distance from market; drainage conditions; crop or tillable land; amount of waste or unproductive land; amount and value of timber; water supply; convenient arrangement of buildings, etc.

The various classes of land such as pasture, waste, (including roads), farmstead, area in crops, etc., are recorded; this generally gives an excellent basis for determining actual value of the farm.

A considerable variety of improvements other than buildings may be added to the farm from year to year, such as the planting of trees, construction of fences, ditches, etc., which are permanent improvements in that they increase the value of the farm. Therefore, such items are not charged as expenses but as new improvements.

**Personal Property.** On most farms a certain amount of money is necessary to carry on the business throughout the year. This is a part of the capital required to operate. In case of dairy farms it generally happens that the current income from the sale of dairy products is immediately put back into operating expenses; under such conditions there may not be any "cash required to operate" in the capital investment. When money is borrowed during the year it is recorded under bills payable; the interest on such funds is chargeable as expense.

The value of the feed, seed and other supplies on hand at the beginning of the year represents capital investment. These may be consumed during the year but at the end there is usually about the same amount of material on hand to be carried into the following year. There may be an increase or decrease in value of the same amount of any commodity; in such cases the difference is automatically accounted for when the summaries are made up at the end of the year.

In arriving at the quantity of material on hand it is not necessary that grain, feed or other material be measured. The capacity of bins can be estimated or calculated very accurately by the farmer; hay or other roughage in the stack or silo can likewise be very closely estimated. Values are based on farm price (see page 10).

All of the livestock on the farm represents personal property. Each class of stock is invoiced separately in order that gain or loss on each enterprise may be approximated.

Values of all stock for slaughter on the farm or on the market are determined on the basis of farm price. Such stock includes all meat-producing animals which have no special breeding value. It is highly desirable that scales be provided for weighing, but if not available, the farmer's estimate of weight will be very close to correct.

Work horses are valued on the basis of their worth for farm work when they are at prime age if such horses are raised on the farm. If bought they are invoiced at cost less depreciation since purchase. If they are valued on the basis of current market prices their value fluctuates with the market and it is then difficult to determine depreciation with accuracy. Horses are usually kept on the farm for the purpose of doing farm work and not for trading. If kept for trading purposes they are then valued on the basis of market price and no depreciation is allowed on them.

Pure bred breeding stock usually has a value above the block or slaughter price and such animals are valued on the basis of breeding qualities and depreciation is allowable on the value represented by the difference between block and breeding price.

Machinery represents a considerable part of the personal property required for farm operation; few farmers realize the value of this capital investment until they have made an actual inventory of it. New machinery or second-hand machinery is recorded at the buying price and this valuation is not changed from year to year; that is, the value of machinery on the farm does not follow market prices. Depreciation must be determined on the basis of the cost and not on some higher or lower value than was not actually paid.

Illustrations of the various capital investment accounts are found in Part Two.

## CHAPTER IV.

## EXPENSES.

As previously indicated certain of the expense accounts are used for income tax reporting and these do not include the entire list of accounts required to determine profits from the standpoint of the farm as distinguished from those of the operator as an individual. Those accounts used for income tax determination are first considered.

**Feed Bought.** In this account (page 51) are recorded all expenses for feed purchased for any and all classes of stock. If any material is traded for any kind of feed it is recorded as a sale in the proper account and the feed received is recorded as expense in this account.

**Hired Labor.** All labor employed (page 53) which is not family labor or operator's labor and which is paid for in cash or material of value is accounted for under hired labor. Only the direct payment for the labor is recorded at the time of settlement with the help; cost of board is calculated from the grocery account (page 63) at the end of the year and the amount chargeable to hired help is then included in the account. A bonus paid to hired men above regular wages in consideration for finishing the season's work, is labor expense and is recorded with the regular wage entries.

Occasionally hired help is required in the house on account of extra work in boarding hired men. Such expense properly belongs in this account. However, when hired help is required in the house to serve the family, this is not a farm expense but a household matter that is recorded in the household account (page 73).

**Machinery Expense.** Payments for repairs or parts for machines should not be confused with new machinery. Repairs for ordinary up-keep or replacement after accidental breaks are expenses and not capital investments. Any addition to machinery which materially extends its usual lifetime beyond its original period of expected usefulness, however, is a permanent improvement, and is classed as new machinery. For example the estimated period of usefulness or life of a binder may be eight years. Canvases may last for only two years and must then be replaced; such replacements constitute expenses for repairs since they do not extend the life of the machine. On the other hand a wagon may have been used for twenty years and certain parts are almost as good as when new; if the original estimated life of the wagon was twenty-five years and certain badly worn parts such as tires, boxings, etc., are replaced, extending the life of the wagon to thirty-five years, such items are "new machinery" or capital investments, sometimes called permanent improvements.

**Tractor Expense.** While the tractor is a part of the machinery equipment of the farm many farmers desire to know the cost of operation of this machine separate from the other equipment and therefore a separate account is provided for it. Any expense in connection with repairing the machine

(except labor) as well as fuel, oil, etc., are recorded in this account. Because of tax regulations items such as gasoline and oil are considered as supplies and the account is so arranged that these are entered separately from repairs. Cost of labor for tractor operation properly belongs in the hired labor account.

When it is desired to determine the annual cost of tractor operation, the depreciation of the machine (page 77) and the interest on the value at the beginning of the year are added to the footings of the tractor account; to this sum is added the labor cost of operation and the result is the annual cost.

**Automobile Expense.** It is necessary to know the cost of automobile operation distinct from the cost of operating the other machinery of the farm because it is usually used partly for farm business and partly for pleasure. The entire expense must be divided in proportion to these uses at the end of the year. Fuel and oil are recorded separately from repairs in a similar manner as in the tractor account.

It is not practicable for the average farmer to maintain a daily record of the use of his car and consequently, at the end of the year the operator must make an honest estimate of the use that was for farm business and that was for pleasure purposes; the proportion of the total repairs that was for farm business is then transferred to the machinery account and the same proportion of the fuel and oil is transferred to the account for miscellaneous expenses.

It makes no difference as to the make or price of a car; if used in farm business the cost of this use is chargeable in the proper place. Some farmers keep more than one car, one for business and one for pleasure. Then the entire cost of operation of the "farm" car is an allowable expense in itself and this should be kept separate from the expense of the car for pleasure purposes. Expenses for pleasure purposes are chargeable in the household and personal account under "incidentals" (page 73).

**Building Repairs.** Most systems of accounting allow for the usual upkeep of the plant. That is, the repairs and replacements are made as required to maintain the property in its usual state of usefulness and these repairs are recorded as expenses. When the annual repair bill becomes greater than the amount of the annual depreciation (page 75) the plant may be torn down and entirely replaced. A building may be estimated to last twenty-five years with ordinary care and use. Such replacements as will maintain the building for this period are repairs. On the other hand, such additions to a building as a concrete floor may not extend the estimated life of the building but materially increases the **value** of the building; such additions are capital investments rather than repairs. Such items as painting, replacing broken windows, doors, etc., are repairs (page 67).

**Threshing Account.** When a farmer owns a threshing rig and does considerable custom work outside his own farm it is desirable that the expense of operation be recorded separately from the general farm expenses (page 61). It is not desirable to do this if only a small amount of outside threshing is done.

Where a separate account is maintained, all expenses for labor, repairs, fuel, board for the men, etc., for all threshing are recorded in this account, and these items are not then entered in other accounts of the farm record. At the end of the season the total threshing expense is transferred to the account of miscellaneous expenses.

If it is desired to determine the cost of threshing for the season, an estimate is made of the cost of horse labor furnished by the operator; the value of management and other labor not paid for in cash is estimated; the annual depreciation of the separator is found in the depreciation account (page 77); that portion of the depreciation of the engine chargeable to threshing is estimated; any other expenses not paid directly in cash are estimated; the addition of these items to the total of the threshing account make up the total cost of threshing for the season.

The annual threshing cost indicated in the above paragraph is not included in the income tax report, only the cash expenses and receipts being allowed.

**Groceries.** Only that part of the food used on the table that is purchased and is consumed by farm labor during the time that such labor is actually performing farm work is chargeable as expense for income tax reporting. In order that the cost of such groceries can be determined with reasonable accuracy it is necessary to maintain a complete record of groceries bought for the table for the entire year and this must be separate from the account for "food furnished by the farm."

It is desirable that the housewife record in the grocery account the number of persons boarded at the end of each month. Each child under seven years of age is considered as one-half adult. At the end of the year the number of persons boarded each month is added for the twelve months. The total of the grocery account divided by the total number of persons boarded each month gives the cost of board per month per person.

By reference to the labor accounts the total number of months of farm work is found. The cost of board per person per month multiplied by the number of months of work gives the amount of grocery cost chargeable as expense for income tax reporting. This amount is included at the close of the hired labor account (page 53).

**Miscellaneous Expenses.** In this account a wide variety of items are included some of which might be classified into separate accounts; however, on account of the requirements of the authorities with respect to income tax reports the account is presented in this form (page 69).

Any expenses which are directly applied to the business that have not been otherwise provided for are included here. Among them are:—taxes on farm property; interest on borrowed money for farm business; interest on farm mortgage; supplies, such as gas, oil, twine, seed, etc.; thresh bill; cash rent; membership in strictly farmers' organizations; subscription to farm papers and some others.

Of the supplies above-mentioned, gas and oil have been considered previ-

ously which are used for tractor and automobile operation. The totals of these supplies (gas, oil, etc.) must be transferred to this miscellaneous account at the end of the year. Fuel of this character that is used for the operation of small gas engines on the farm is recorded in this account directly.

**Depreciation of Buildings.** Land in itself does not constitute a farm; the necessary buildings for housing stock as well as other improvements are essential. The land is permanent and when proper systems of farming are conducted the fertility is nearly if not quite maintained. Buildings "wear out" with time and use; capital is invested in the buildings and unless some charge is made against the business each year for replacement, eventually the original capital investment in the buildings will be exhausted. Consequently the depreciation of buildings is an allowable expense of operation in order that the investment may be maintained.

There is no known method of determining depreciation in a precise way because it cannot be determined in advance exactly how long any building will last. The best that can be done is to make an honest estimate of the number of years that a building will last, based on actual experience. The estimated period of usefulness being determined, the original investment is charged off in equal parts over the entire period so that each year there is a certain amount of expense not paid in cash but which, nevertheless, was paid at some time.

The following illustration shows the method of calculation of depreciation:— Mr. A. built a barn in 1915, costing \$1,000. The building was of such character that Mr. A. estimated the barn would last twenty years with ordinary care and use. If the original cost is distributed over the twenty years, the rate of depreciation (1.00 divided by 20) is five per cent; five per cent. of \$1,000.00 is \$50.00 which is an annual expense for each of the estimated 20 years. The amount of depreciation sustained up to the present (1921) is \$250.00 or \$50.00 for each of the years 1916-20 and \$50.00 is the allowable amount for 1921. If it is desired to find the value of Mr. A's barn at the end of 1921, by deducting the depreciation, \$300.00, from the original cost, the result is \$700.00.

Frequently permanent additions are made to buildings which either extend their period of usefulness or increase their value by an amount beyond that originally contemplated as ordinary up-keep. In that case it is usually desirable to revise the estimate of the period of usefulness and base the depreciation on the newly established value, due allowance being made for depreciation sustained previous to the year of the improvements. Frequently it happens that an incorrect estimate is made originally on the period of usefulness of a building; toward the end of the estimated period a new estimate may be made and depreciation charged on another valuation, due allowance being made for depreciation to the date of the change as originally estimated. The new rate of depreciation will of course apply to the revised or second valuation. After the original cost of a building has been charged off as depreciation no further allowance can be made.

No depreciation on a farmer's own dwelling is allowable as an expense for income tax reporting. While the dwelling is a part of the farm investment the farmer is placed in the same class as all other business men who are not allowed depreciation on their homes. This is one of the items for which the fixed exemptions of \$1,000 for single men and \$2,500\* for married men, are allowed.

**Depreciation of Machinery.** The same principles underlie the calculation of depreciation of machinery as of buildings. Each implement is considered separately; an estimate of the probable period of usefulness is made; equal amounts are then charged off each year until the original cost is entirely accounted for in depreciation.

There is a wide variety of small tools on which depreciation is not usually charged, but their purchase price is recorded as a direct expense at the time of purchase. Among these are shovels, forks, hoes, hammers, saws, small blacksmith tools, etc. While this is not technically correct, it is usually the case that many of these are lost, broken, stolen or otherwise disposed of at about the same rate each year and the replacements usually maintain them, collectively, at approximately the original value. This method is followed in order to do away with as much detail as possible in the record-keeping.

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The following accounts do not enter into the records for income tax purposes, but are necessary if the farm operator wishes to know what his farm is really returning. A considerable part of the family living is produced on the farm. Members of the family are employed on the farm. The returns from the farm pay for recreation, doctors' bills, etc. The value of the operator's own time in actual work and management enters into the cost of operation.

**Family Labor.** On nearly every farm members of the family usually perform some part of the farm work and usually they are not paid directly in cash for these services rendered. Such work, nevertheless, has a real value and is so considered in the cost of operation. Almost invariably during the seeding and harvest seasons the boys above ten years of age work in the field and frequently perform work equivalent to that of regular hired men. If the boys did not do this the necessary labor would have to be hired. Further, the boys and girls usually assist with the chores, in taking care of the various classes of livestock, etc. Almost invariably the housewife looks after the poultry and if dairying is conducted she has many duties that are farm work directly as distinct from household work.

It is generally a job of too much detail for the farm operator to keep record of the many details of the work done by the members of the family but the estimated value of this work should be recorded monthly or at the very longest at the end of the year in terms of value of hired help saved. Many farmers feel that they are succeeding because there is a balance in the bank

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\*1921 Law.

at the end of the year when, as a matter of fact, if all labor applied to the farm is accounted for at current rates a considerable loss is sustained.

**Operator's Labor.** In determining the profits from farm operation the value of the work done by the operator and of his management are important considerations. The farmer might act as manager on another farm and he would receive a salary therefor. Or it might be necessary to employ a man to take the place of the farm operator, so far as possible, in which case a direct expense for hired labor is incurred. The charge to be made for this item depends upon a variety of considerations, among them being size and type of farm as well as the efficiency of the operator himself. The best basis for determining this charge is, perhaps, a knowledge of what farm managers generally receive on a salary basis. Variation from \$200 to \$2,500 per year has been noted, with many farmers placing the charge at \$1,000 to \$1,200 per year (1920).

**Bills Payable.** This account does not enter into any of the summaries but is included for the convenience of the farm operator. Memory cannot always be depended upon, especially with respect to the smaller items. Perhaps most farmers depend upon bills to remind them when payments are due but these often do not arrive until a few days previous to the due date in which case it is often inconvenient or impossible to arrange for payment in the short time.

When a bill is paid it becomes an expense and is then entered in the proper account.

Record is made not only of the amount of bills payable but also to whom due and when; date of payment should always be recorded. In case of dispute such a record will be accepted in courts of law against verbal testimony based on memory only.

**Household and Personal Account.** This record should be kept by the housewife because she is usually more familiar with the various items. None of the items in this account appears in the income tax records. As previously stated the household should have the same relationship to the farm business as has the household of any other business man to his business.

A wide variety of items are recorded here. Clothing bought for various members of the family are personal expenses. All manner of household furnishings such as furniture, bedding, stoves, pianos, dishes, cooking utensils, etc., properly belong in this account. A proportionate part of the cost of operating a light plant, based upon the relative amount of use that is made of it by the household and by the farm, is chargeable here.

Various kinds of fuel bought are recorded in this account, but any wood or other fuel that is furnished by the farm is recorded in the account for "food, fuel and house rent." Donations to church and charitable institutions as well as expenses for recreation, subscriptions to daily or other newspapers (farm papers are included under miscellaneous farm expenses) and expenses for education are properly entered in this account.

Various sums set aside by any members of the family for a savings account are entered here. Many incidental expenses such as doctor's bills, candy and cigars, life insurance premiums, fire insurance premiums on the dwelling, etc., are entered as incidentals.

That portion of the cost of operation of the automobile chargeable to recreation or pleasure is transferred from the automobile account at the end of the year and entered here under "running expenses."

As previously stated, expenses in connection with the dwelling cannot be included for income tax purposes. Consequently, cost of repairs on the house is recorded in this account. However, repairs to a house occupied by a hired man and his family and repairs to a house in which a tenant lives are proper farm expenses for the owner and are recorded under building repairs (page 67).

## CHAPTER V.

### RECEIPTS.

Many different kinds of products are sold from most farms and the greater the number of enterprises the greater the variety of receipts. Items of income are classified into accounts to meet the requirements for tax reporting, but more especially for the convenience of the farm operator, both in recording the items and for studying the business.

**Crop Sales.** On account of the regulations governing income tax reports the receipts from the sale of the three leading cash crops are recorded in as many separate accounts. Thus, if wheat, barley and flax are the three crops bringing the highest cash income the sales of each are recorded in an account by itself. Or, corn, potatoes and sweet clover might be the three leading cash crops in which case the sales of each are recorded separately. All crop sales other than those of the three leading crops are recorded together in one account.

Only cash sales are recorded; however, if some material is traded, then the transaction is entered as a sale of the crop item; the article received in trade is recorded in the proper account under purchases or expenses.

In recording sales of various commodities it is always desirable to enter dates of transactions, the quantities sold and the price per unit received.

The sales accounts must carry the sales of material carried over from the preceding year as well as the sales of produce of the current year. The sales of carry-over material are balanced by the values of the material recorded in the inventories for the beginning of the year; however, if no inventories are kept there is nothing to balance the carry-over, but the sales must be recorded just the same. The latter practice does not give a true statement of the year's business, nor does it give the correct data for income tax reporting.

Frequently grain is placed in storage in an elevator, a storage ticket being taken therefor. If such grain is still in storage at the end of the year it is recorded in the inventory at the market price. Whenever it is sold it is then entered as a sale and not before. Any storage expenses in connection with such transactions are properly charged under miscellaneous expenses if they have not been deducted from the receipts.

**Cattle Sales.** Transactions involving each class of livestock are recorded separately in order that some approximation may be made of the relative profitableness of each class. Furthermore, a comparison of the gross income from each enterprise often gives a good grasp of the real organization of the whole farm.

All sales of cattle are recorded and trades are accounted for in a similar manner as with crops. Here, again, it makes no difference if stock is carried over from the previous year; the sale must be recorded at the time it is made, the value in the beginning inventory balancing the sale.

**Horse Sales.** Transactions involving horses are recorded in a similar manner as those of other classes of stock. Where horse trades are made, the stock disposed of is a sale and is recorded as such and the article received in trade is a purchase and so recorded.

**Hog Sales.** Various classes of hogs are sold such as shotes, barrows, gilts, boars, sows, etc. Market hog sales are recorded so as to indicate the number of pounds sold and the price per pound, as well as the number of head. Breeding stock is usually sold by the head and in that case the weight, etc., is not recorded. Hogs butchered and consumed on the farm are not recorded here but the value of meat consumed is recorded on page 65.

**Sheep Sales.** Ewes, wethers, lambs and rams are common kinds of sheep sold. Stock sold for slaughter is usually disposed of by the pound while breeding stock is sold by the head. Returns for stock sold on consignment are generally made on the net basis, the various shipping expenses being paid by the consignee and deducted from the sale price. In such cases only the net returns are recorded as sales.

**Poultry Sales.** Poultry has formerly been sold largely in the local market but of late, considerable attention has been given to the larger wholesale markets. Where shipped alive, the cash cost of crates and other cash outlay are recorded as expense. However, if cash is paid to labor for dressing poultry, or other class of stock for that matter, this expense should be recorded in the "hired labor" account.

**Egg Sales.** Eggs sold for cash or trade are recorded in this account. Eggs consumed on the table are not entered as sales but are recorded in the account for "food, fuel and house rent", (see page 65). Frequently eggs are traded for groceries in which case the eggs are recorded as sales and the grocery transaction is recorded in that account.

**Dairy Product Sales.** When any kind of dairy products is sold the net receipts are recorded. Some care should be exercised in recording kind of product sold, amount and price per unit. In case of trade for groceries the transaction is handled in a similar manner as for eggs.

**Bills Receivable.** This account is for the convenience of the farm operator and does not enter into the income tax report. Whenever a bill is paid the transaction is completed in this account and the amount received is entered in the proper place for it under receipts.

All sales, that are made with payments to be made sometime in the future, regardless of whether the promise to pay is in writing or verbal, are recorded in this account. Frequently a partial payment is made when an article is sold by a farmer, the balance to be paid at a later date; the payment made is a cash receipt and is so recorded but the amount still due is recorded in this account.

When a bill receivable has been carried on the books for a long time and every effort has been made to collect it without success and in the honest

opinion of the farmer it is not collectable, then it may be charged as an expense in the miscellaneous account.

**Food, Fuel and House Rent.** Available records indicate that from 40 per cent to 60 per cent. of the food consumed by the average farm family is furnished directly by the farm. Even for the smallest family this amounts to hundreds of dollars per year and for large families this income is considerably more. Frequently the statement has been made that board on the farm costs little or nothing but this is far from the truth.

Vegetables and other garden truck, dairy products, eggs and meat furnished by the farm, reduce grocery bills markedly, although some farmers feel that they have not the time to produce these commodities. With increasing diversity of farming this account becomes more and more important.

House rent is an item of considerable size. An estimate of this item is made, based on the size and value of the dwelling, usually being about 12 per cent. of the value of the building.

The housewife is the logical individual to keep this record and many farm women take great pride in keeping the account, showing their share of the contribution to the family living. The record may be maintained on a monthly basis with considerable accuracy, although separate daily records are recommended for some items which are variable from day to day, such as eggs and vegetables. In pricing commodities the farm price method should be used. The market price is the price which the farmer receives for these commodities rather than the retail price paid by consumers in town.

**Miscellaneous Receipts.** All cash receipts or the equivalent which are not otherwise provided for are entered in this account if they pertain to the farm business. A variety of items properly belongs here, such as income for work outside the farm, hauling school bus, sales of miscellaneous material such as gravel, sand, wool, coal, etc., produced on the farm. Interest received on loans made to others, when secured by farm mortgages is properly entered here.

Income from bonds or from any other business outside of the farm is not entered in this account but should be recorded in a separate account or set of books for that purpose. The accounts are arranged for the purpose of making tax returns and to study the farm business; consequently, transactions which do not pertain to the farm are not included.

## CHAPTER VI.

## SUMMARIES.

Two general classes of summaries or balance sheets are used, the first being for the purpose of income tax reporting and the second for the study of the farm as a business.

## Income Tax Summaries.

Income tax reports may be made on either the accrual basis or on the so-called "cash" basis, but those farmers who do not keep records of their business are compelled to make their tax reports on the "cash" basis, although this method does not truly give the net profit because of the difference in the amount or value of property carried over from one year to the next.

"After becoming established on the accrual basis it is the simplest and fairest basis on which to report farm profits because— 1. The actual profits of the year are credited to the year in which they occur. Under the "cash receipts and disbursements" basis the actual sales reported in a year's time may represent the production of more than one year as in the case of selling corn, wheat or hogs, produced in two years' time. 2. The record of each year's business is completed to date. Difficulties are eliminated such as going back to previous years to the record of the cost of an animal in determining the profit on its sale. This will need to be done if reporting on the "cash receipts and disbursements" basis. 3. Actual depreciation or losses on livestock are claimed in the year in which they are sustained. 4. When reporting on the "cash receipts and disbursements" basis the profit from the sale of all farm equipment, produce, and farm land must be reported as income in the year sold. When reporting on the accrual basis, the inventory value of livestock and other products on hand at the beginning of the year can be claimed as a deduction from the gross sales.

"The main disadvantages of the accrual method of determining farm profits is in changing from the "cash receipts and disbursements" basis to the accrual basis of reporting. This is because the value of all livestock and products on hand and raised on the farm must be counted as profits in the year the change is made unless adjustment to January 1st, 1917, is made from actual records or proofs satisfactory to the Commissioner of Internal Revenue.

"The most favorable time to start reporting on the accrual basis is when farming is first begun."\*

**Accrual Summary.** The summary for income tax reporting on the accrual basis consists of the inventory values of all property except land and dwelling.\*

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\* From North Dakota Farmer's Account Book, Agricultural College, N. Dak., 1921.

at the beginning and end of the year; purchases; sales; expenses and depreciation.

The inventory values for the beginning of the year are added to the total purchases of the year; the inventory values for the end of the year are added to the total sales; the difference between these two sums shows a balance which is called "gross profit" by the Bureau of Internal Revenue. This balance does not include expenses and depreciation which are combined and deducted from "gross receipts". The result is "net farm profit" for income tax reporting on the accrual basis (page 87).

**"Cash" Summary.** The summary for reporting income tax on the "cash receipts and disbursements" basis consists of purchases, sales, expenses and depreciation.

The difference between purchases and sales is called "gross profits". Expenses and depreciation are combined as under the accrual basis and are deducted from the gross profits; the result is "net farm profit" on the "cash" basis of reporting.

**Farm Business Analysis Summary.** The summary for the study of the farm business is made, not from the standpoint of the individual operator who is the head of a family, but from the standpoint of the investment. (See page 93). The difference between all values entering into production and the total income represents the net returns.

The first step in making this summary is to determine the total investment. The value of land, including the buildings, with the total value of all other inventories at the beginning of the year constitute the investment (page 93, lines 1, 2, 3, and 4). For this purpose any mortgage on the property may be disregarded.

In the case of tenants the value of real estate does not enter into this summary; only the property owned by the tenant or to which he holds title is considered.

A considerable part of the food consumed in the household is produced on the farm. In some cases fuel, such as lignite coal, wood, etc., are furnished for household use. Since the value of the dwelling enters into the total farm investment, the equivalent of rent of the house is an income from the farm. These items constitute income but are not included in income tax reports but are included as part of the return on the investment (page 93, line 9).

If any interest has been paid on a farm mortgage it will have been entered under miscellaneous expenses (page 69); to balance this expense such amounts are entered in the summary (line 7, page 93).

If there have been improvements to the property such as the breaking up of sod land, setting out trees, drainage, etc., the cost of these will have been entered under expenses. They should now be combined and entered in this summary as increased value of property (line 8, page 93).

The value of the labor and management of the operator is an expense of the farm. For the physical labor performed "going wages" are allowable; the value of management (see page 11) is estimated and this combined with the labor constitute a charge (line 20, page 93).

There are two generally recognized measures of profit from farming operations, namely, interest on the investment and labor earnings of the operator. When either of these is to be determined the other is included as a deduction. Thus, if labor earnings are to be determined the interest on the investment is first deducted and the remainder is the amount that the operator gets for his work and management.

Interest on the investment is the measure of profit that is comparable with that of any other business and is determined by dividing the net profit or earnings on the investment (line 21, page 93) by the total amount of the investment (line 5, page 93). This income or interest on the investment according to general farm experience amounts to from two and one-half to five per cent.

The labor earnings of the operator (line 18, page 93) is the amount remaining after deducting interest on the investment and this generally has amounted to little more than wages of the hired man if as much as five or six per cent. is allowed as interest on the investment. Under some conditions labor earnings of the operator have amounted to very much more than this and also they have not infrequently fallen considerably below nothing.

## CHAPTER VII.

### MEASURES OF EFFICIENCY.

In order to determine the degree of efficiency in any business it is desirable to have certain standards by which various operations may be measured. It is recognized that farming is one of the most complicated of all lines of business on account of the wide variety of products raised on each farm and on account of the variety of conditions over many of which the farmer has little if any control. Such conditions as rust on wheat, insect pests, drought, too much rain, diseases of stock, etc., have a direct bearing on production and consequently on profits. Therefore, standards of efficiency must be established over a considerable period of years in order to overcome these conditions. Even then considerable care must be used lest some measure appears to show inefficiency or the opposite when, as a matter of fact, there may have been no possible way of changing the conditions. However, it is frequently possible to determine some of the causes of large or small profits by comparing various items or factors with certain more or less fixed standards.

**Size of Business.** The amount of profit (or loss) varies with the size of the business in a general way. Farming is a family business and the efficient size of farm is that which can be properly managed and operated by the farmer and his family without large amounts of hired labor. In general the most efficient size of farm in the plains region of the Dakotas and Minnesota is apparently about 480 acres where grain farming is followed. In the western part of the region the unit is somewhat larger in acreage and in the eastern it is somewhat smaller.

Where the greater part of the farm business is crop production, size of business may be measured by acreage as above indicated. If, however, considerable business is done with livestock or if special or intensive crops are raised which are much more expensive than the grain crops then some other measure must be used for size of business.

In considering size the use of labor is important, which may be slightly more efficient on large farms, but this advantage is more than offset on very large farms by some other disadvantages.

**Crop Acres per Horse.** A great many farms support more work horses than are necessary. Some farmers raise colts to replace the old, worn-out animals and this is a commendable practice. The tractor is used by some to replace work horses but actual practice reveals that not as many horses are replaced as is commonly believed. In considering the crop area in relation to the number of work horses, the tractor should be considered in the equivalent to horses.

Where farms produce approximately the same crops the number of

"crop acres per horse" sometimes shows how one farm is more efficient than another. The equivalent of the work done by each horse is represented by that required to operate a certain number of acres of crops (see page 94). In North Dakota each horse does the work equivalent to that required on about 33 acres on the average. Some farmers accomplish the same amount of work with twenty-five to thirty per cent less horses than the average while others require as much more to do the same amount of work.

Where considerable acreages of corn and potatoes are produced the above measure of 33 acres per horse is high; horses on these farms may do more actual days of work than on others because much more work is required per acre for these crops. The average farm horse in North Dakota works about 80 days per year at productive labor.

**Yield per Acre.** The greatest factor that determines high or low costs per unit is yield per acre. It costs little more to produce 20 bushels of wheat per acre than to produce 10 bushels. If the former yield is made the cost per bushel is nearly 50 per cent. less than where the smaller yield is made under the same conditions. Even so, many continue to hold the idea that it is acres that determine profit rather than efficient production.

While the farmer cannot control rust, rainfall, etc., there are many practices that almost invariably lead to higher yield. Any farm that does not produce more than 11 bushels of wheat per acre as an average over a period of ten years should have a change of methods. As the different practices are used in production, the record of the resulting yield is of great value as the years go by, in determining which practice gives the best results.

**Income from Stock.** The annual income from stock must be considerably more than the cost of feed. Roughly, feed is only about 75 per cent of the total cost. The dairy cow that produces less than 150 pounds of butterfat in a year is scarcely more than a boarder. When butter fat sells for 50 cents per pound the income from sales is only \$75, which did not cover cost of feed alone in 1920 and scarcely did so in 1921.

To find the total or real income from any class of stock the value of the stock at the beginning of the year is added to the purchases; the value of that class of stock at the end of the year is added to the sales of stock and stock products; the difference between the two sums represents the income.

By using the foregoing method of calculation for each class of stock it is possible to arrive at some conclusion as to which classes are most profitable. It is sometimes necessary to determine this for several years before the true answer is found.

**Machinery Value per Acre.** When prices of machinery are high it is almost a necessity that the maximum use be secured from each implement. Many farms in the northwest are profitably operated with less

than five dollars' worth of machinery (including harness) for each acre cultivated. If the inventory value of machinery (page 77) is divided by the total number of acres in crops this figure is obtained.

Some farms are equipped with certain classes of machinery that are used for only a very few days each year; such investments are frequently unprofitable. Among these might be mentioned such machines as silage cutters, threshing rigs, etc. Such equipment may well be owned and operated jointly by a number of neighbors, thus saving a large amount of overhead expense.

**Automobile Cost.** Many farms are now equipped with a low-priced car. The time has come when the auto is practically a necessity but there is a very wide variation in the cost of operation even for business purposes. An annual cost of operation of more than \$300 (including interest on investment and depreciation) is hardly justifiable unless the conditions are exceptional.

**Cost of Labor.** During the war period wages were exceedingly high and the expense for this item has been more keenly felt, perhaps, than any other. If the total expense for labor, including hired labor, family labor and the operator's own work, is divided by the number of acres in crops an approximation of the labor cost per acre is found. Unless there is a considerable acreage of corn and potatoes or a large amount of livestock maintained, the labor cost per acre should be less than four dollars (1920).

Many measures of efficiency may be calculated by the farm operator who studies the business of farming. For special types of farms, special measures or factors may be used. Probably the two most important measures of efficiency on farms of the northwest are yield per acre for crops and income per animal unit for stock.

## PART TWO

### ILLUSTRATED ACCOUNTS.

On the later pages will be found the account forms, showing the recorded entries of a North Dakota farm as of 1920.

The arrangement of the forms for the various accounts has been made after years of experience in the endeavor to make them as simple and practical as possible. Further experience will doubtless show the need for minor changes but the general plan will be continued.

It should be borne in mind that records maintained for purposes of making income tax returns are kept from the standpoint of the individual and the income of his dependents is legally his income. On the other hand, the records for purposes of studying the farm business are maintained from the standpoint of the farm; in this case all items of value entering into farm operation are recorded regardless of whether some labor is performed by the operator's son, for example, or whether it is done by a hired man.

The page-and column-references in the summaries for the different purposes give full directions for including the proper items for each of the desired results.

The forms herein described, which pertain to income tax returns, are similar to those prepared by a committee of the American Farm Bureau Federation in cooperation with the U. S. Department of Agriculture and which were commended by the Bureau of Internal Revenue of the U. S. Treasury Department for the purpose of making income tax returns. The forms and accounts have been adapted to conditions in the northwest and are now being used in the North Dakota Farmers' Account Book of the Extension Division of the Agricultural College. More than five thousand farmers of North Dakota are now (1921) using this system on their farms.

The farmer who is beginning to keep records or the teacher who is giving instructions should secure the North Dakota Farmers' Account Book from the Agricultural College for the actual recording of the entries. Practice work or the starting of an actual farm record should begin with the inventories and depreciation accounts (pages 75 to 83). Then should be recorded the other items of capital investment for the "beginning of the year". From this point to the end of the year the various items of expenses and receipts should be recorded as they occur, in the proper accounts. At the end of the year or at the end of the period of practice work the inventories (pages 75 to 83) are completed, following which the summaries are calculated.

The inventories for the close of the year are the same as the inventories for the beginning of the succeeding year and may be transferred directly into a new record book.

### THE FARM PLAT.

By locating on a plotted sheet the various fields and other features of the farm it is often possible to make some changes that materially increase the efficiency of operation. The illustration on the opposite page represents a farm as operated in 1920. Very frequently the placing of the farm in picture form makes it possible to see how to shorten the distance to certain fields or to improve the shape of the fields. It is also desirable to keep a record of the crop rotation from year to year, together with manure applications, etc. The record of yield of the various crops may be placed on the plat if desired; also some of the tillage practices may be recorded. All such information becomes more and more valuable as the years go by, not only in determining the best practices for the future but in case of sale these records become of great value to the new owner.

There is a large number of conditions that must enter into the arrangement of fields, among them being soil, drainage, convenience, character of crops to be raised, etc. Natural features such as coulees, lakes, sloughs, hills and stones must be considered so that the most economic use is made of the fields.

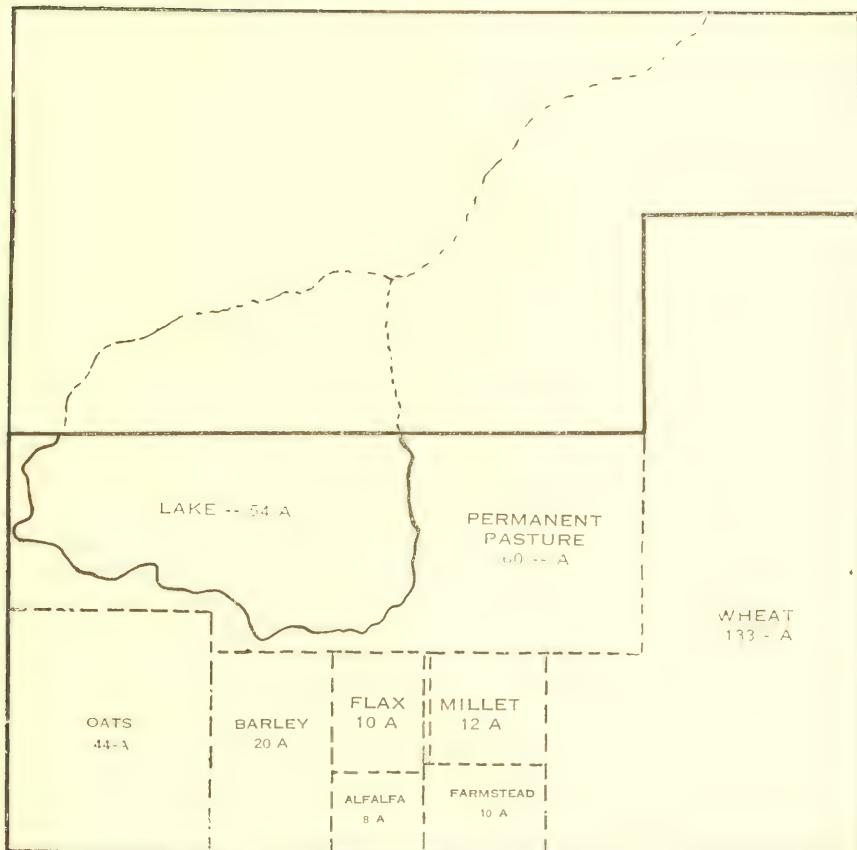
If soil and drainage conditions would permit, the alfalfa (opposite page) might better have been where millet is at present. The permanent alfalfa would then be adjoining the pasture and also the farmstead. This would mean a saving in fencing as well as in convenience.

The flax might well have been placed east of the farmstead; the oats and barley fields could have been arranged so that the long way extended east and west; thus a saving in time in going to and from them would be made; the "turns" would also be longer and consequently less of them.

It is of considerable importance to the farmer in laying out his farm for the first time to take into consideration the location of the farmstead. If physical features such as hills or stream channels are on the farm a location with respect to these may outweigh the desirability of some location with strict adherence to convenience and time-saving. Ordinarily the farmstead should be at or near the center of the farm and reasonably near to the public road which leads to market. It is seldom desirable that the farmstead be located at one corner of the farm for this necessarily causes long trips to and from some fields.

By plotting on a separate sheet the location of the buildings with respect to each other it is often seen how the lay-out may be improved at small expense and cause considerable saving of time. This is especially true when new buildings are to be constructed; by use of a picture of the farmstead it is easy to get the various advantages and disadvantages of location in mind.

## FARM PLAT



**ACREAGE AND YIELD OF CROPS.**

On the opposite page are indicated the acreage and yield of the various crops raised. The acreage of each crop seeded is recorded at the close of the seeding period; the yields are entered immediately after harvest. Any crops which are not indicated on the left side of the page should be entered in the blank spaces left for that purpose. It will be found desirable to enter the variety of various crops in parenthesis as indicated for wheat, oats and others. This record then becomes an excellent guide based on fact as to which varieties give the best results, especially when the system is followed for a number of years and the conditions of different years are encountered with the various varieties.

If the land is owned entirely by the operator the acreages and yields are entered in the columns under "owned land". If the farmer rents some additional land or rents the entire farm the acreages and yields are entered under "rented land". If land is rented on shares the amount of the crops which the renter receives is entered under "share received". If land is rented for cash, the entire amount of production is entered under "share received", and the amount of cash rent paid is entered under expenses (page 69).

Where land is share-rented the fraction under "share received by operator," which represents the share that the operator receives, is enclosed with a circle.

Where two crops are planted on the same land, such as sweet clover and wheat, the wheat acreage is entered as usual; the sweet clover acreage is also entered but the figures are enclosed in a circle. The acreage of sweet clover is then not included in adding to find the "total acres in crops."

**THE FARM AREA.**

The form at the bottom of the opposite page shows other land as well as the crop area. Land that is in prairie sod that is used for pasture is entered as "permanent pasture". Land that is seeded to timothy or other grass, even though used for pasture, should be included above with the crops. Also, hay land, even though it may consist of sloughs and "pot holes" should be included above, if hay is cut from it. The land that is occupied by the farmstead includes the land on which the buildings stand, barn lots, garden, etc. There is always some waste land on the farm, if no more than that occupied by the public roads. This together with lakes, sloughs, and any other land that has no productive use, is entered as "waste land."

"The total acres in farm" consist of the total farm area of owned or rented land, entered under the respective headings.

If any land is rented out and not operated by the owner, it is entered in the blank space under "owned" land.

## SIMPLE FARM ACCOUNTS

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## ACREAGE AND YIELD OF CROPS

Crops Grown	Owned Land			Rented Land			Share Received by operator (1-2 2-3 3-4 3-5)
	Acre	Yield per Acre	Total Yield	Acre	Yield per Acre	Total Yield	
Wheat (Marquis)	133	10 $\frac{1}{2}$	1393 $\frac{1}{2}$				
Oats (New Victory)	44	14 $\frac{1}{2}$	638				
Barley	20	8 $\frac{1}{4}$	165				
Rye							
Flax (N.D. 114)	10	13	130				
Speltz							
Corn							
Potatoes							
Hay, prairie							
Alfalfa (Grimm)	8	3	24				
Sweet Clover							
Millet	12	3	36				
Annual Pasture							
Total Acres in Crops	227						

## FARM AREA

	Owned	Rented
Total Acres in Crops (from above)	227	
Permanent Pasture	60	
Timber		
Farmstead, Barnlots, Garden, etc.	10	
Waste Land—Roads, Lakes, etc.	63	
Total Acres in Farm	360	

**CROP SALES.**

Because of the demands for income tax reports the sales of crops are recorded in four accounts; the three leading cash crops are accounted for in three separate accounts and all other crop sales are recorded together in one account. These crops may vary from year to year and from farm to farm and therefore each farmer must write in the heading for each of the three accounts.

The accounts on the opposite page show that wheat, barley and millet were the leading cash crops on this farm; that is, these were the crops that brought the highest cash return. On another farm these accounts might have been wheat, flax and potatoes, depending on which brought the highest cash returns.

All crop sales should be recorded as fast as they occur. Grain hauled to the elevator for storage or which will be sold later and for which a storage ticket is received, is not a sale and should not be recorded until the grain is actually sold.

If any kind of grain or other crop is traded for another kind of seed, or any similar transaction is made, such transactions are sales and are so recorded. The article or commodity received is considered as a purchase and is entered as an expense in the proper account. If a trade is made, one commodity for another, and no price is named in the transaction, then the market price is used as the basis of purchase and sale. The value of seed secured in trade in this manner is recorded as an expense on page 69.

At the close of the year each account is totaled separately and the total of each is transferred to the proper place in the summary. The references to pages to which the totals are to be forwarded, indicated on the opposite page, are for the income tax report on the accrual basis. If it is desired to make the tax report on the "cash" basis, the summary for this is found on page 89 and the references to pages from which the amounts are to be transferred are there indicated.

## CROP SALES

Date	Wheat Sales	Amt. Rec'd.
Meh. 10	53 bu. @ \$2.75	\$ 145.75
Sept. 3	65 bu. @ 2.30	149.50
Sept. 4	135 bu. @ 2.25	303.75
Sept. 6	142 bu. @ 2.28	323.76
Sept. 7	133 bu. @ 2.30	305.90
Sept. 8	145 bu. @ 2.28	330.60
Sept. 9	137 $\frac{1}{2}$ bu. @ 2.24	308.00
Sept. 10	141 bu. @ 2.22	313.02
Sept. 13	135 bu. @ 2.23	301.05
Sept. 14	133 bu. @ 2.27	301.91

Total (Forward to page 87, column 3)

\$2783.24

## Barley Sales

Sept. 15	75 bu. @ \$ .60	\$ 45.00
Sept. 16	60 bu. @ .62	37.20

Total (Forward to page 87, column 3)

\$ 82.20

## Millet Sales

Sept. 15	3 T. Millet @ \$12.00	\$ 36.00
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Total (Forward to page 87, column 3)

\$ 36.00

## All Other Crop Sales

Sept. 16	10 bu. Flax @ \$1.40	\$ 14.00
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Total (Forward to page 87, column 3)

\$ 14.00

**CATTLE PURCHASES AND SALES.**

For convenience in keeping the accounts, all direct transactions involving cattle are recorded in the same account. All cattle bought during the year are recorded under "purchases" and all cattle sold are entered under "sales". Cattle purchases are capital investments.

Care must be exercised by the farm operator to see that sale values are not recorded under purchases and vice versa. Some farmers follow the practice regularly of entering under "details of transaction" such expressions as illustrated opposite, namely, "1 cow (bought)". Thus the entries of purchases and sales can be checked up later after memory fails to bring to mind whether a certain entry represents a purchase or sale. Such difficulties are not likely to occur unless there is a large number of similar transactions. No items are recorded under "purchases" and "sales" except cattle bought or sold, respectively.

If the income tax report is to be made on the accrual basis, the total of column 1 is transferred to page 87, column 2, opposite the word "cattle."

If the report is made on the "cash" basis, only the purchase price of cattle bought during the year and **sold during the year** can be included in the summary on page 89. Cattle bought during the year but not sold may be charged in a later year when the cattle are sold. If the total purchases of cattle are transferred to page 89, ("cash" basis of reporting) then this cost cannot be charged in a later year when the cattle are sold. All difficulty is avoided if report is made in the accrual basis.

**HOG PURCHASES AND SALES.**

All transactions involving hogs are recorded in this account in the same manner as cattle transactions in the cattle account. The total of column 1, when there are any purchases, is transferred to page 87, column 2, opposite the word "hogs" if the report is to be made on the accrual basis. The total of column 2 (\$111.60 opposite) is transferred to page 87, column 3.

Hog purchases are capital investments.

## SIMPLE FARM ACCOUNTS

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## CATTLE PURCHASES AND SALES

## HOG PURCHASES AND SALES

**DAIRY PRODUCT SALES.**

Nearly every farm now produces some surplus of dairy products that is either sold or traded for groceries or other commodities. Whether sold or traded, any dairy products, such as milk, butter, cream, etc., that are disposed of off the farm, are recorded as sales in this account. If given in trade the articles received in trade are charged under expenses or purchases. This is especially necessary where it is desired to determine the cost of board for hired labor; if the items of groceries received in trade are not included in the grocery account, the charge for board for labor is not correct.

The most accurate method of recording dairy sales is to make the entries as fast as sales are made. Where cream is shipped and the returns are made, with the expense of shipment deducted, the net amount received is recorded in this account and no entry is made for the expense of shipment. However, if the farmer pays any expense direct in connection with the shipment, which is not deducted from the receipts, this expense is recorded in the proper account.

Frequently, where there are large numbers of transactions each month, as when whole milk is sold daily, the amounts of these sales for the month are recorded on separate sheets and the monthly totals are recorded at the end of the month in this account. This method is not so accurate as where each sale is recorded in the account directly.

When cream is sold many farmers record with the entries the price received per pound or per gallon and also the percentage of butterfat contained. This record may become very valuable later in case of any controversy with respect to past transactions.

The illustrations (opposite page) show how one farmer made the entries. It is noted that one entry shows that 10 pounds of butter was given in trade for groceries and the amount was included in the total for the month.

At the end of the year the total of this account is forwarded to page 87, column 3, if the income tax report is to be made on the accrual basis.

## SIMPLE FARM ACCOUNTS

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## DAIRY PRODUCT SALES

**HORSE PURCHASES AND SALES.**

Purchases of horses are capital investments. Records of purchase and of sale are placed in the same account for convenience in recording. All horses, colts, stallions, etc., bought or sold are recorded in this account. If a horse is traded the transportation is recorded as a sale and the article received in trade is recorded in the proper expense account.

The same methods apply to the transfer of the totals of this account to the income tax summary as apply for cattle. When reporting on the accrual basis the total of column 1 is transferred at the end of the year to page 87, column 2, and the total of column 2 is transferred to page 87, column 3.

There were no purchases or sales of horses on this farm during the year 1920.

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**SHEEP PURCHASES AND SALES.**

Sheep purchases are capital investment. Record of purchases and sales of sheep is made in this account in a similar manner to that for cattle.

The sales of wool should not be recorded in this account but are entered under miscellaneous receipts (page 49).

## SIMPLE FARM ACCOUNTS

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## HORSE PURCHASES AND SALES

Date	Details of transactions	Purchases	Sales
	None		
	Total		

Column 1 | (Column 2)

## SHEEP PURCHASES AND SALES

Date	Details of transactions	Purchases	Sales
	None		
	Total		

Column 1 | (Column 2)

**POULTRY PURCHASES AND SALES.**

Like those of other classes of stock, purchases of poultry are capital investments. Poultry sales are recorded whether fowls are dressed or alive. Charges for preparation for market are recorded in the proper account for expenses. If transportation charges are paid by the farmer they are recorded under miscellaneous expenses (page 69).

The total of column 1 is transferred at the end of the year to page 87, column 2, and the total of column 2 is transferred to page 87, column 3, if tax report is to be made on the accrual basis. Thus, the amount, \$43.03, (opposite page) is found in column 3, page 87, opposite the word "poultry."

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**EGG SALES.**

Egg sales are recorded in this account as fast as they are made. Some housewives, who keep this record, have the habit of recording the detailed items on calendars or other sheets and then enter the total for each month in this account, which was the method followed on the farm here represented. This method is possibly not as accurate as to enter each sale as it occurs.

Whenever eggs are traded for groceries or other commodities record is made in this account in the same manner as for a sale. The articles secured in trade are entered in the proper expense accounts.

The total of the egg account (\$88.83 opposite) is transferred at the end of the year to page 87, column 3, when tax report is to be made on the accrual basis.

In connection with the egg account should be maintained a careful record of the number of eggs produced as well as the records of sales and table consumption. The average farm hen should produce not less than 100 eggs during the year.

## SIMPLE FARM ACCOUNTS

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## POULTRY PURCHASES AND SALES

EGG SALES

Date	Quantity & Price	Amt. Rec'd.	Date	Quantity & Price	Amt. Rec'd.
Jan.	16 doz. @ .49	\$ 7.84			
Feb.	11 doz. @ .52	5.72			
Mch.	5 doz. @ .38	1.90			
May	17 doz. @ .37	6.29			
June	20 doz. @ .36	7.20			
July	21½ doz. @ .40	8.60			
Aug.	11 doz. @ .45	4.95			
Sept.	23 doz. @ .42	9.66			
Oct.	24 doz. @ .50	12.00			
Nov.	21 doz. @ .52	10.92			
Dec.	25 doz. @ .55	13.75			
				Forwarded	
					\$ 88.83
				Total (Forward to p. 87, Column 3)	\$ 88.83
	Forward	\$ 88.83			

**MISCELLANEOUS RECEIPTS.**

While space is furnished in the preceding accounts for the principal items of receipts there is a considerable variety of miscellaneous sources of income other than those already indicated. Some of the common items are indicated on the opposite page. Besides these might be mentioned the following:—fire insurance on farm buildings (but not life insurance), pay for service on election or school boards, payments for managing a shippers' association payment for soliciting, assessing, or any other outside work. Any receipts taken in, due to the efforts of the farmer or members of his family or as a result of investment in farm property, if not previously accounted for, are entered here.

Interest on liberty bonds, or income from other bond securities, or income from any business other than farming, is **not** entered in this record, but may be recorded in a separate account if desired. These are not a part of the farm income and must not be included. Special provision is made on the government income tax reports for such income.

Where a farmer owns a threshing rig and does a considerable amount of outside custom work, the details of expenses and receipts are recorded on page 61. The total receipts (from page 61) are transferred to this account in order that they may be included in the income tax report.

Some farmers make a practice of doing considerable plowing with team or tractor outside their own farms. Receipts for such work are recorded in this account and cash expenses therefor are recorded in the proper expense accounts.

If any machinery, that has been in farm use, is sold or traded, any profit that is made, i.e., difference between book value and amount received, is recorded in this account. If a loss is sustained, the difference between book value and amount received is recorded in the account for miscellaneous expenses.

Frequently farmers receive small amounts as fees for breeding, where pure bred stallions, bulls, etc., are owned. Service fees of all kinds are recorded in this account.

Many farmers exhibit stock and farm produce at fairs and receive premiums or prizes. Such receipts belong in this account.

The total of this account (\$312.27) is transferred at the end of the year to page 87, column 3, if income tax report is made on the accrual basis.

## SIMPLE FARM ACCOUNTS

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## MISCELLANEOUS RECEIPTS

Date	Details of transactions	Amt. Rec'd.
June 15	6 loads sand @ \$1.00	\$ 6.00
June 15	Road work	39.10
June 25	Scrap Iron	10.00
Sept. 6	Team and wagon threshing	78.00
Oct. 7	Pasturing 3 horses	12.00
Oct. 15	1 calf hide	3.67
Dec. 15	Hauling School bus, 3 months	150.00
Dec. 31	Service on School board	13.50
Receipts for outside threshing (from page 61, column 2.)		
Total (Forward to page 87, column 3)		\$ 312.27

**EXPENSES FOR FEED BOUGHT.**

Any and all classes of feed bought for livestock are recorded in this account. It is desirable that, so far as possible, the class of stock that is to receive the different feeds bought be indicated; this is especially necessary if the cost of maintaining the various classes of stock is to be determined. It is scarcely possible to ascertain very closely the profit or loss on any particular class of stock unless the amount of feed consumed is known; feed usually constitutes seventy-five percent. or more of the cost of keeping stock.

The entries on the opposite page indicate how the records are made. It is frequently the case that feed is brought for several classes of stock, in which case an estimate at least should be made of the amount that is to be consumed by each class.

On farms where considerable livestock is kept this is an important account because in such cases there is usually a considerable amount of concentrated feed bought, such as corn, oil meal, bran, etc., which are not produced on the farm. No record is made in this account of feed raised and consumed on the farm.

Cash expense for grinding feed is not recorded in this account but is entered under miscellaneous expenses (page 69).

The total of this account is transferred at the end of the year to page 87, line 8.

## FEED BOUGHT

**EXPENSES FOR HIRED LABOR.**

On large farms the expense for hired help is large. Care should be exercised that all details of this account are given because it is closely examined by the tax collectors. The entry of "time employed" for each hired man should always be made because the cash cost of board for the help must be determined at the end of the year and this is, of course, based on the length of time that the help is boarded.

No charge is allowable in this account for members of the family in the house. Neither is the charge for a hired girl in the house allowable if she is employed to assist in cooking and in other work for members of the family only. If, however, the hired girl is necessary because of extra work on account of hired men for the farm, the cost of such help in the house is an allowable charge. For example, if the housewife has all that she can do to care for the members of the family and extra men are hired for farm work during certain seasons, causing extra work in the house, and a hired girl is employed, the expense of such hired girl is allowable.

If a family is employed who lives in a separate house on the farm, only the cash paid them is chargeable here.

The cash cost of board is determined from the grocery account (page 63) the charge, \$8.00, being determined by the amount of labor and the length of time employed. In making this charge the time put in at farm work by members of the family is not included. The cash cost of board of the operator cannot be allowed here because this is one of the items covered by the flat exemption allowed by law.

To illustrate:—John Olson worked eight days; Geo. Jones worked 18 days. These two periods of time combined make exactly a working month of 26 days. In the grocery account (page 63) it is seen that the cash cost of board is \$8.00 per month. This amount multiplied by 1 (month) gives the amount, \$8.00, charged in the hired labor account for the cash cost of board. No allowance can be made for cash cost of board for the children because a flat exemption is made for their living.

At the end of the year the total of this account is transferred to page 87, line 9, if report for income tax is to be made on the accrual basis.

## SIMPLE FARM ACCOUNTS

53

## EXPENSES FOR HIRED LABOR

**FAMILY LABOR.**

By family labor is meant any farm work done by members of the family other than that of the operator. This does not include work done by the housewife or children in the house except such work as that in connection with dairying, etc., that is farm work.

Frequently the housewife or children care for the poultry, assist with the dairy work and, occasionally, work in the field taking the place of a man. Whenever this is done the value of such work is entered in this account. While this is not an allowable expense for income tax purposes it is a part of the cost of operation of the farm and is, therefore, necessary when studying the farm as a business (see page 93).

To illustrate:—it is seen (opposite page) that John worked for his father for one month during the year. This was in harvest, 1920; to have hired the same labor at going wages the cash cost would have been \$90.00. Therefore, \$90.00 was the value of the help thus rendered. It makes no difference so far as production is concerned whether the help was paid for in cash or not; the work was done.

The farmer's wife took care of the poultry and assisted with the dairy. Since this was quite regular work the farmer estimated at the end of the year the amount of time put in each day by his wife; on a basis of a ten-hour day she did the equivalent of 1.4 months of work which was valued at the rate of \$60.00 per month, making a total charge of \$84.00.

Since members of the family are considered as dependents and their income is the income of the head of the family for purposes of income tax reporting, if payment were recorded for family labor an income for the same amount would be recorded under miscellaneous receipts. Thus the transaction would balance and therefore no entry is made for the tax report. It is included, however, in the summary for the study of the farm as a business (page 93, line 11).

## FAMILY LABOR

Date	Names of Members of Family Engaged in Farm Work.	Time Employed	Value of Work Done
Sept.	John (18 yr. son) in harvest Wife caring for poultry & dairy (1 hr. per day for year)	1 Mo. 1.4 Mo.	\$ 90 00 84 00
	Total (Forward to page 93, line 11)		\$174 00

**EXPENSES FOR MACHINERY.**

For convenience in keeping the records transactions relating to "new machinery" and "repairs" are placed in the same account, but the costs are recorded in separate columns. New machinery bought constitutes capital investment and all items of this kind are transferred to page 77, column 3, at the end of the year.

New machinery consists not only of various implements that are bought at "first hand", i. e. direct from the dealer, but also any implements that are bought "second hand" at a sale or otherwise. The cost or price paid is recorded in this account under "new machinery" and then included in the inventory at the end of the year.

The cost or buying price is recorded here even though credit is received for an old machine that was traded in on the transaction.

Repairs for machinery cover a wide variety of expenses (see opposite page). Any part or addition to any implement or to harness, that maintains it in an ordinary state of repair, is included in this account. Small tools such as saws, hammers, forks, shovels, etc., when bought to replace those broken or lost, are recorded in this account under repairs.

As previously indicated and following, page 58, separate accounts are provided for automobile and tractor expenses. The cost of repairs recorded in these two accounts is transferred to the general account for expenses for machinery (opposite) at the end of the year.

Care must be used that the totals for supplies, such as gas and oil for tractor and automobile, are not entered in this account.

At the end of the year the various items in column 1 are transferred to page 77, column 3. The total of column 2 (\$160.73) is transferred to page 87, line 13, when income tax report is made on the accrual basis.

## SIMPLE FARM ACCOUNTS

57

## EXPENSES FOR MACHINERY

Date	Details of Transactions	Cost of New Machinery	Cost of Repairs
Apr. 1	Sharpening plow lays		\$ 5.00
Apr. 19	Drill repairs		.25
Apr. 19	Post auger		2.50
June 19	Tires set on wagon		6.00
June 19	Clevises and bolts		8.50
June 25	Repairs on hay rake		3.65
June 25	Repair parts for mower		7.20
June 30	2 pitch forks		.25
June 30	Rope for hay fork		32.00
July 1	Repair on cultivator		1.65
Aug. 3	Canvases for binder, etc.		30.05
Sept. 3	Harness repairs		19.75
Sept. 3	Evener		1.60
Sept. 3	Repair on grain tank		8.10
Oct. 11	Repair on gas engine		3.68
Oct. 11	1 shovel		2.30
Oct. 11	1 hammer		1.25
Oct. 15	Sharpening plow lays		4.50
Dec. 10	Light sleigh	\$25.00	

Tractor repairs (from p. 59, col. 2)  
Auto repairs (from p. 59, col. 2)

(Forward items col. 1 to p. 77, col. 3)  
(Forward total col. 2 to p. 87, line 13)

### Column 1   Column 2

**EXPENSES FOR TRACTOR.**

As previously pointed out (page 16) expenses for operating a tractor are divided into two classes to conform to income tax regulations. These are: first, gasoline, oil, etc., and second, repairs. No labor in operating the tractor or in repairing is included in this account, but this is accounted for in the labor account (page 53). The farmer, whose record is here shown had no tractor and therefore no expenses are recorded. It is believed that if more farmers kept a careful record of the operation of these large machines there would be fewer of them in use.

To determine the annual cost of operating a tractor the following items must be considered:— depreciation, interest, repairs, fuel, labor, value of time lost on account of breakdown, etc.

At the end of the year the total of column 1 is forwarded to page 69, and the total of column 2 is forwarded to page 57, column 2.

**EXPENSES FOR AUTOMOBILE.**

As previously mentioned (page 17) gasoline and oil are recorded separately from the cash repairs of the car. The entries on the opposite page show the method of recording and the kinds of entries included in the two classes of expenses.

When the totals of the two classes of expenses are found at the end of the year it is necessary to divide each in proportion to the amount of use of the car for farm business and for pleasure. This can only be done by an honest estimate of the farmer because it is impractical for the average man to keep a record of the amount of time that the car is used for each purpose. If the honest judgment of the operator is that one-half the use of the automobile is for farm business, then this proportion of each of the two classes of expenses is transferred to the page and column referred to opposite. If, however, three-fourths of the use of the automobile is for farm business then this proportion of the cost is charged against the farm business.

To illustrate:— the total expense for gas and oil (opposite) was \$62.29. The farmer estimated that three-fourths of the use of the car was for farm business (as indicated). Three-fourths of \$62.29 is \$46.72, which is the "amount chargeable to the farm" and is transferred to page 69, to be included in the general farm expenses. Three-fourths of the repair bill, \$27.00, amounts to \$20.25 and this amount is transferred to page 57, column 2. The remaining one-fourth of each of the totals is personal expense and is transferred to page 73, and recorded under "running expenses."

## SIMPLE FARM ACCOUNTS

59

## EXPENSES FOR TRACTOR

## EXPENSES FOR AUTOMOBILE

Date	Gas and Oil	Amount Paid	Date	Repairs & Parts	Amount Paid
Mch. 10	6 gal. gas	\$ 1 92	Mch. 20	1 Spark Plug	\$ 1 00
	5 gal. oil	4 50		1 Tire	18 00
Mch. 25	8 gal. gas	2 56	Mch. 30	Tighten rods	6 50
Apr. 5	50 gal. gas	15 00	June 5	Bolts and parts	1 50
July 5	50 gal. gas	15 50			
July 5	5 gal. oil	5 00			
Aug. 10	50 gal. gas	15 50			
Oct. 15	7 gal. gas	2 31			
Total		\$ 62 29	Total		\$ 27 00
$\frac{3}{4}$ Amount chargeable to farm (Forward to page 69).		\$ 46 72	$\frac{3}{4}$ Amount chargeable to farm (Forward to page 57, col. 2)		\$ 20 25
Col. 1			Col. 2		

**THRESHING ACCOUNT.**

Comparatively few threshermen know the cost of operation of their rigs and the matter of determining the charge that is to be made for custom work is therefore more or less of a guess or general 'concensus of opinion'. It is generally recognized that those operating threshing rigs have not made any considerable amount of profit out of the enterprise. Where a farmer owns a rig and does considerable custom work the accompanying record should be kept. While no rig was owned by the farmer whose record is here presented, some illustrative entries are indicated on the opposite page.

The various items of expense for outside threshing that are recorded in this account are not entered elsewhere. Cash expenses for threshing on the operator's own farm are recorded in the various other accounts. Where the farmer hires all his threshing done or where he owns a rig but does little if any outside custom threshing this account is not used. All expenses for outside threshing are recorded in column 1 and all receipts for the same are recorded in column 2.

Where several farmers own a rig jointly each may keep the record of his own expense in his general account, in which case this threshing account is not used.

On page 18 is indicated how to find the total cost of operating a threshing rig; the difference between the receipts and expenses, including those previously pointed out, shows the profit or loss from the season's operations.

At the end of the year or at any time after threshing is done the total of column 1 is transferred to page 69, and the total of column 2 is transferred to page 49.

## THRESHING ACCOUNT

Date	Details of Transactions	Amount Paid	Amount Received
	Hired Labor		
	Repairs on Separator		
	Groceries for Cook Car		
	Coal		
	Oil		
	Small Tools		
	Received from John Doe for 8 days threshing		
	(Forward total col. 1 to p. 69)		
	Total (Forward total col. 2 to p. 49)		
		Column 1	Column 2

**EXPENSES FOR GROCERIES.**

The housewife usually keeps this account. Care should be exercised that nothing is included in this account except groceries, that is, food bought or received in trade (see page 19).

The record opposite shows the form for keeping the account for the month of January. At the close of each month, record is made of the number of persons boarded, as indicated.

Whenever any kind of farm produce is traded for groceries the transaction is considered as a sale and purchase and the sale is recorded under receipts in the proper account and the groceries received in trade are recorded here.

On account of lack of space the entire detailed grocery record is not presented here, only the totals for each month after January being shown. The detailed account should be maintained.

Where groceries are bought for a cook car for a threshing crew, if a separate account is kept for threshing they are entered in that account. If little or no outside threshing is done these groceries are entered in this grocery account.

At the close of the year the grocery account is totaled and on this farm the bill amounted to \$298.10. The total number of months of board was ascertained by adding together the number of persons boarded each month. The total grocery bill, \$298.10, divided by the total number of months of board, 37 $\frac{1}{4}$ , shows the actual cash cost of board to be \$8.00 per month. This does not include the value of food furnished to the table by the farm, which is considered in its proper place (page 65).

Reference to the labor account (page 53) shows that there was 1 month of hired labor besides that of the operator employed during the year. The cash cost of board per month, \$8.00, multiplied by the number of months of labor boarded, shows the cash cost of boarding the labor to be \$8.00. This portion of the board bill only is allowable as an expense for income tax purposes.

The difference between the total amount of the grocery bill and the amount charged to labor is a part of the living that is covered by the flat exemption of \$1000 for single men and \$2500 for married men, and the amount is chargeable in the household and personal account under running expenses (page 73). The cash cost of board for labor is carried to page 53 where it is included in the total cost of labor.

## EXPENSES FOR GROCERIES

Date	Kind & Quantity	Amount Paid	Date	Kind & Quantity	Amount Paid
	Paid				
Jan. 5	2 sacks Flour	\$ 12.00			\$ 298.10
	20 lbs. Sugar	4.00			
	6 lbs. Coffee	1.80			
	6 qts. Canned Fruit	2.10			
Jan. 15	Cinnamon, Vanilla				
	Cloves	.75			
	Corn Starch	.50			
	Yeast	.20			
Feb.	Groceries	22.25			
Mch.	Groceries	21.55			
Apr.	Groceries	25.25			
May	Groceries	24.80			
June	Groceries	25.95			
July	Groceries	23.70			
Aug.	Groceries	41.40			
Sept.	Groceries	26.50			
Oct.	Groceries	23.20			
Nov.	Groceries	22.30			
Dec.	Groceries	21.75			
			Total		\$ 298.10
			Cost of groceries per month per person		8.00

## Number Persons Boarded Each Month

January	3	Amount forwarded	18 $\frac{1}{2}$
February	3	July	3
March	3	August	3
April	3	September	3 $\frac{3}{4}$
May	3	October	3
June	3 $\frac{1}{2}$	November	3
Amount Forward	18 $\frac{1}{2}$	December	3
		Total Months of Board	37 $\frac{1}{4}$

**VALUE OF FOOD, FUEL AND HOUSE RENT FURNISHED BY THE FARM**

The value of the various commodities furnished by the farm toward the family living, such as dairy products, eggs, meat, vegetables, etc., is not properly an expense for income tax purposes, because the cost of producing this material has already been charged as an expense in connection with the farm operation. However, for the purpose of arriving at the real income from the farm this must be considered.

The city dweller pays house rent or the equivalent in interest, depreciation, taxes and repairs. The farmer does not usually pay house rent but has the dwelling for his use while living on the place, it being a part of the farm investment. Usually about 12 per cent. of the fair valuation of the building will give a reasonably close figure for rent. In the case of the record here shown, the house was valued at \$600 and rent was charged at \$72 per year.

On some farms wood is produced and is consumed by the family; likewise coal is sometimes found on the farm and contributes to the family living. The values of these commodities are therefore a real source of income, replacing what would otherwise be bought.

The average housewife is in the habit if keeping some kind of record of egg production, butter sales, etc. A daily record should be maintained of the consumption of various farm products that are used on the table, if the amount of these varies from day to day. Space does not permit the presentation of an assortment of forms for this purpose; any sort of sheets that will permit recording the amounts and values of milk, cream, butter, eggs, meat, vegetables, etc., so that the values of each can be determined readily at the end of the month, is suitable. The totals for each commodity for the month may then be entered in this form (opposite) so that at the end of the year the value of each commodity, as well as the total value of food furnished, can be found.

Whenever butchering is done, the amount of meat, lard and other products that are to be consumed in the house are recorded in lump sums. It may require several months to consume these products but it is unnecessary that they be divided between the months when they are consumed.

At the close of the year the total (\$366.75) represents the value of all food, etc., furnished by the farm to the family and to the hired help as well. By reference to the grocery account (page 63) it is seen that there were  $3\frac{3}{4}$  months of board furnished during the year. The value of the food for one month, \$366.75 divided by  $87\frac{1}{4}$ , is \$9.85; this amount multiplied by the number of months of hired labor (one) and deducted from the total value of the food, etc., leaves \$356.90, which is the amount of direct income or benefit that the family received from the farm. This amount is forwarded at the end of the year to page 93, line 9, where it makes up a part of the summary showing the real income.

## SIMPLE FARM ACCOUNTS

THE VALUE OF FOOD, FUEL, AND HOUSE RENT FURNISHED BY FARM

Total  
— (From the above total deduct the estimated value of food consumed by hired labor; the result is forwarded to p. 93, line 9)

**PERMANENT IMPROVEMENTS AND REPAIRS TO FARM PROPERTY.**

Most farms of the west are being physically improved from year to year by the addition of buildings, fences, trees and shrubbery, drainage or other form of improvement. Whenever such additions are made they constitute capital investments and are recorded on the opposite page under "new improvement." Only the cash cost of the improvements is recorded in this account; these improvements should not be confused with repairs to permanent improvements, since the latter only maintain the property in its ordinary state of usefulness.

The actual value of improvements may be in excess of the cash cost indicated in this account. To illustrate:— the cost of lumber and other material for the poultry house (opposite page) amounts to \$164. This does not include the labor required to construct the poultry house, which, in this case, was that of the farmer himself. In the inventory (page 75, column 3) the cost of the hen house is indicated as \$200.00, which includes the value of the labor.

When special labor is employed to construct permanent improvements and is paid for, record is made of such expense under "new improvement."

At the close of the year the various items of permanent improvements are transferred to the inventory (page 75) as illustrated by the above poultry house. However, some items, such as trees and shrubbery are not recorded in the inventory separately, but their value is reflected in the value of the land (page 93, line 1).

"Repairs to permanent improvements" consist of all the material purchased for the maintenance of the buildings, fence, etc., (except repairs to dwelling which are not allowable for income tax purposes). Lumber, nails, cement, etc. used for replacement purposes come in this class as well as paint, and shingles for repairs to the roof. However, cement and other material for a new floor in a barn or shingles for an entire new roof, etc. are "new improvements."

It is expected that the buildings will be maintained in an ordinary state of usefulness and preservation and this is taken into consideration when the "life" of the structures is estimated as the basis for determining depreciation.

The total of the items in column 2 (\$8.00) is forwarded to page 87, line 12, when the income tax report is made on the accrual basis.

## PERMANENT IMPROVEMENTS AND REPAIRS TO FARM PROPERTY

**MISCELLANEOUS FARM EXPENSES.**

Some of the common items of expense that are entered in this account are indicated on the opposite page.

Many farmers do not realize that such items as subscriptions to farm and livestock journals are proper farm expenses. (Newspapers are not). A part at least of the use of the telephone is for farm business and it therefore is a farm expense.

It frequently happens that a farmer makes a trip by rail or auto to some point on farm business, such as for finding a market for a product, purchasing feed or cattle, etc., and the cash expense of these trips (except board) is a proper expense both for income tax purposes and for purposes of studying the farm business.

Membership in agricultural organizations is held for the purpose of improving the business of the farm in some direct or indirect way. Consequently, the cost of such membership is a farm expense.

The thresh bill is a direct farm expense; if however, the farmer furnishes the thresherman with feed for his horses and this feed has been raised on the farm (not bought) this is not included in the thresh bill. If the feed is bought it is entered as "feed bought" (page 51). To illustrate:—the thresh bill (opposite page) was \$525.00; if the farmer agreed to furnish oats to the value of \$100.00 in addition to this charge and he had raised these oats on the farm this item cannot be included as an expense because the cost or expense of producing these oats has already been charged in the various accounts; to make a further allowance for the value of the oats as an expense would constitute a double charge. But it may be remarked that these oats could be sold for \$100, cash. If they are sold instead of being fed to the thresher's horses, the threshing bill is then increased \$100 and the sale of the oats is charged as a receipt which balances the extra \$100.00 expense in the thresh bill.

No items of a personal or household character are permissible in this account; these are recorded in the account for that purpose; such expenses are not farm expenses and cannot be allowed for income tax purposes or for farm business study.

It is a regulation governing income tax records that all items of supplies bought, that pertain to the farm business, be recorded in this account; therefore the fuel and oil expense for a tractor (page 59, column 1) is transferred to this account at the end of the year. Also, that portion of the gas and oil used for operating the automobile that is chargeable against the farm business, (\$46.72—page 59, column 1), is included here at the end of the year.

The total of the miscellaneous farm expenses (including fuel and oil) is transferred at the end of the year to page 87, line 11, to be included in the income tax summary and later in the farm summary.

## SIMPLE FARM ACCOUNTS

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## MISCELLANEOUS FARM EXPENSES

**BILLS PAYABLE.**

With the system of farming in practice in the northwest it is almost a matter of necessity that considerable farm business be done on credit. Money is borrowed at the bank; machinery and other equipment is bought to be paid for "in the fall" after the crop is threshed; building material is often purchased in the same way; in fact, where one crop is depended upon entirely as a source of income very many items of expense are carried to the fall season.

The account for "bills payable" is used entirely for convenience as it does not enter in any way into the summaries.

Such bills as are contracted to be paid on a definite date are entered in this account. For example, money borrowed (opposite page) is recorded with the date borrowed, name of party from whom borrowed, rate of interest to be paid, date due, date paid and the amount of interest paid. The amount of interest paid is transferred to page 69 where it becomes a part of the expenses of operation if the loan was in connection with the farm business. Mortgages are recorded here and any interest paid on same is an expense to be recorded on page 69.

Current bills, such as those for groceries, machinery repairs, etc., may be recorded here as contracted; the farm operator should never fail to obtain and preserve the sales ticket or other form of record made by the dealer at the time articles are purchased on account. Unintentional mistakes are frequently made and the farmer has little recourse unless his part of the record is available to correct the errors.

**BILLS RECEIVABLE.**

Record of money due the farmer is even more important than of bills payable because it is usually necessary for notice to be sent, requesting payment. This is especially necessary if any considerable amount of credit business is done.

Frequently farmers sell grain or other commodities to neighbors or others, which are to be paid for at later dates, such as the transaction indicated with Joe Ressler on the opposite page. This bill of \$75.00 was not paid before the close of the year; in such cases the items are transferred to the record for the following year. If the time comes when it appears that certain bills receivable will never be paid, they are then transferred to the account for miscellaneous expenses and become part of the record for income tax and other purposes.

Whenever interest is received on a bill receivable in connection with a farm transaction, such interest is recorded in the account for miscellaneous receipts (page 49).

## BILLS PAYABLE

Date Contracted	To Whom	Rate of Interest	When Due	When Paid	Amount of Interest	Amount of Principal
Apr. 1	First Natl. Bank	8%	Nov. 1	Oct. 1	\$8.00	\$200.00

## BILLS RECEIVABLE

Date Issued	From Whom	Rate of Interest	Date Due	Date Paid	Amount of Interest	Amount of Principal
Apr. 4	Joe Ressler 30 bu. wheat		Oct. 30		\$1.75	\$75.00

**HOUSEHOLD EXPENDITURES AND PERSONAL ACCOUNT.**

This record is generally of primary interest to the housewife, especially if she is thrifty. Many people "wonder where the money goes". There is only one way to find out with accuracy and that is to keep some kind of record.

The form and entries on the opposite page show a simple method of recording the household and personal items. The entries are some of the common ones of all the members of the family. In all cases the amounts paid are recorded in the first column; they are then distributed to the various subdivisions of the account.

Only one item for groceries for the year is entered in this record; by reference to page 63, it is seen that the total of groceries bought during the year amounts to \$298.10; the part of this chargeable to labor was transferred to the labor account (page 53); by subtracting this amount, \$8.00, from the total grocery bill for the year, \$298.10, the remainder, \$290.10, is found and this is the value of the groceries chargeable to the family. This amount is entered in this account and classified under "running expenses".

The expense for operation of the automobile for pleasure properly belongs in this account. On page 59, column 1, it is seen that the total cost of fuel and oil for operating the car for the year was \$62.29. Of this amount, three-fourths, or \$46.72, was charged to the farm business (page 69); the difference between this amount and the total, is \$15.57, which is the cost of fuel for operating the car for pleasure; this amount is entered in this account and classified under "running expenses."

Likewise, the charge for repairs of the automobile is divided between farm and pleasure purposes and that part chargeable to pleasure (difference between total repair cost and amount chargeable to farm, (page 59, column 2) is included in this account, being \$6.75, which is classified under "running expenses."

Repairs to the dwelling are not recorded in the account for repairs to permanent improvements but are recorded in the household and personal account and classified under "running expenses."

The records of groceries, gasoline and oil and automobile repairs are entered in this account but once at the close of the year, after the amounts chargeable to the farm are recorded in the proper accounts.

None of the items recorded in the household and personal account is allowable as expense for income tax purposes.

## SIMPLE FARM ACCOUNTS

## HOUSEHOLD EXPENDITURES AND PERSONAL ACCOUNT

Date	Amount and Kind of Expenses	Expenses Classified				
		Amount paid	Cloth- ing	House- hold furni- shings	Running Fuel	Charity and Educa- tion
Jan. 5	1 pr. Shoes	400	400			
Jan. 5	Candy and cigars	35				35
Jan. 5	3 games rummy	30				30
Apr. 5	1 Teakettle	250		250		
Apr. 5	1 Ten Coal	1400			1400	
Apr. 5	Wash woman	500				500
Sept. 18	Church donation	1000				1000
Sept. 30	Political Contribution	1800				1800
Dec. 10	Phonograph records	300				300
Dec. 10	To John, cash	2500				2500
	Groceries (from p. 03)	29010				29010
	Gas & Oil (from p. 59) Auto repairs (from p. 59)	1557 675				1557 675
	Total	39457	400	2500	1400	31742
						10000
						25000
						2165

**DEPRECIATION ACCOUNT OF BUILDINGS.**

As previously pointed out valuation of buildings is based on the cost; depreciation is based on this valuation and this does not vary from year to year with market values.

The entries on the opposite page are for the year 1920.

Because income tax requirements demand nothing previous to 1913, this date is used as the basis or starting point; any buildings constructed previous to this date are recorded and the cost, less estimated depreciation to 1913, is used as the value for March 1 (column 2). If any building, fence or other permanent improvement is constructed after 1913 the date is recorded in column 1.

New improvements, added during the current year, are recorded in column 1, page 67, and at the end of the year are entered in column 3, opposite. Value of new improvements includes not only cash costs but value of labor involved in construction. No depreciation is allowed on permanent improvements for the year of construction.

The rate of depreciation is determined by estimating the expected period of usefulness in years; one, divided by the number of years estimated, gives the percentage rate of depreciation (column 4). The amount of annual depreciation for each year is found by multiplying the cost (column 2) by the rate (column 4). The amount of depreciation previous to the current year (column 5) is found by multiplying the annual depreciation (column 4) by the number of years from date of construction or 1913 (column 1) to the current year. Depreciation previous to the current year (column 6) added to the annual depreciation (column 5) gives the total amount of depreciation to the end of the current year (column 7).

Depreciation of the farm dwellings is calculated separately and is included in the farm summary (page 93) but cannot be allowed for income tax purposes.

The total annual depreciation of farm buildings is determined by adding the items in column 5, opposite; this total is forwarded to line 14, (page 87) if tax report is made on the accrual basis.

When new improvements to any building are added in any year, the total depreciation to the end of that year is deducted from the original valuation and the value of the new improvements are then added; this new valuation is then the basis of depreciation for succeeding years; this new value is recorded in column 2 for the following year and a new rate of depreciation is calculated in a similar manner to that above explained. (See page 20).

## DEPRECIATION ACCOUNT OF FARM BUILDINGS

	Date acquired	Cost or market value, March 1, 1913, plus cost of improvements up to be- ginning of taxable year	Cost of new improvements made dur- ing the year (Col. 1, page 67)	Rate of depreciation	Amount of depreciation claimed for the year	Depreciation sustained prior to this taxable year	Total depreciation sustained to end of this taxable year
Tenant House							
Barn	1913	\$ 1000	\$ 30	5%	\$ 50	\$ 300	\$ 350
Silo							
Corn Crib							
Granary							
Hog House							
Hen House	1920		200				
Machine Shed							
Garage							
Fencing	1913	100		5%	5	30	.35
Tiling							
Drainage Ditches							
Total		1100	230	XX	55	330	385
Dwelling House	1913	600		5 $\frac{1}{3}$ %	32	192	224
Column	1	2	3	4	5	6	7

**DEPRECIATION ACCOUNT OF FARM MACHINERY.**

As previously stated (page 21) depreciation of farm machinery is determined in the same manner as for farm buildings.

The following illustration (from the opposite page) shows the process for the year 1920: a gang plow was purchased in 1917 (column 1) for \$75 (column 2). It was estimated by the farmer that the plow would last about 12 years which indicates that approximately 8 per cent. (column 4), should be charged off each year as depreciation. The cost price, \$75, multiplied by the rate, 8 per cent., gives the amount of annual depreciation or \$6.00 (column 5). Since the plow was not used in farm work in 1917 to any considerable extent, depreciation is allowed for 1918-19, two years; thus the depreciation sustained prior to the current year (1920) is \$12.00 (column 6). By adding depreciation for the current year to that for the previous years, the total depreciation to the end of the current year, \$18.00, is found (column 7).

Because the use of the automobile is usually for farm business and pleasure, attention is called to it. This farmer estimated that three-fourths of the use of the car was for farm business; the full value or cost price of the car was \$600 in 1918 and this value is entered as indicated on the opposite page; however, \$600 is not included in arriving at the value of farm machinery, three-fourths, or \$450, being used. On the basis of farm use, \$450 is the valuation on which depreciation is charged. Depreciation on the remaining \$150 valuation may be charged in the personal account (page 73) if desired but this expense cannot be allowed for income tax purpose.

Frequently a threshing rig is owned jointly by two or more neighbors. In that case only the share owned by the farmer keeping the record is entered on page 77, column 2. For the purpose of verification later it is advisable to enter the fraction representing the share owned.

At the end of the year the total of column 5 is carried to line 15, page 87, if income tax report is made on the accrual basis and to line 10, page 89, if report is made on the "cash" basis.

## DEPRECIATION ACCOUNT OF FARM MACHINERY

	Date acquired	Cost or market value March 1, 1913, plus cost of new improvements to the beginning of this year.	Cost of new machinery purchased during this year.	Rate of depreciation.	Amount of depreciation claimed for this year.	Depreciation claimed prior to this year.	Total depreciation to end of this taxable year.
Wagons (1)	1913	\$ 30.00		10%	\$ 3.00	\$ 18.00	\$ 21.00
(1)	1918	140.00		5%	7.00	7.00	14.00
Tanks							
Racks ( )							
Buggies (1)	1913	30.00		5%	1.50	9.00	10.50
Bobsleds ( )							
Sleighs (1)	1920		\$ 25.00				
Manure Spreader							
Sulky Plows ( )							
Gang Plows (1)	1913	40.00		8%	3.20	19.20	22.40
(1)	1917	75.00		8%	6.00	12.00	18.00
Tractor Plow							
Discs (1)	1916	50.00		12%	6.00	18.00	24.00
Drags (1)	1916	24.00		15%	3.60	10.80	14.40
Packers ( )							
Corn Planter ( )							
Corn Binder ( )							
Potato Planter							
Potato Digger							
Drills (1)	1913	110.00		7%	7.70	46.20	53.90
Binders (1)	1919	215.00		10%	21.50		21.50
Headers ( )							
Binders (1)	1914	125.00		10%	12.50	75.00	87.50
Mowers (1)	1913	45.00		8%	3.60	25.20	28.80
Rakes (1)	1913	20.00		10%	2.00	14.00	16.00
Feed Mill							
Gas Engines (1)	1917	65.00		10%	6.50	13.00	19.50
Tractor							
Auto ( $\frac{3}{4}$ )	1918	450.00		20%	90.00	180.00	270.00
Auto (full value)		(600.00)					
Cream Separator	1915	85.00		14%	11.90	59.50	71.40
Harness (4d.)	1915	160.00		5%	8.00	40.00	48.00
( )							
Small Tools	1915	20.00					
Total		\$ 1684.00	\$ 25.00		\$ 194.00	\$ 546.90	\$ 740.90
Column	1	2	3	4	5	6	7

**INVENTORY OF SEED, FEED AND SUPPLIES.**

At the beginning and end of each year an inventory or invoice is taken of all personal property, the seed, feed, cash, etc., being shown on the opposite page for a North Dakota farm for 1920.

It is not necessary to measure the quantities of various products; every farm operator can estimate the quantities of grain of various kinds as well as feeds, etc., with considerable accuracy.

Prices of various commodities are determined on the basis of market price less the cost of delivering to market. For those products having no market price such as corn fodder, silage, etc., the farm operator must estimate a fair price based on comparative values with other feed products which have a market price. Every farmer knows the feed value of his corn fodder, for example, as compared with hay.

Any grain, potatoes, etc., that may be in the elevator or warehouse, which are not sold, must be recorded in the inventory at the market price at the time the inventory is taken.

The amount of cash on hand to be used as working capital is recorded; there may be none on some farms such as those selling dairy products. Money borrowed, on which interest is paid is not recorded in the inventory.

Care should be exercised that the quantities of each kind of grain, especially, are recorded in the proper columns. The material on hand at the beginning of the year, together with the price per unit and value, is entered on the left side at the time the record is started, which should be January 1. At the close of the record year the corresponding figures are entered at the right.

The invoice or list of property at the end of the year corresponds exactly with the inventory at the beginning of the following year.

Because of the requirements for income tax reporting the inventory record of three leading cash crops (page 39) must be made separately. If the three leading cash crops are wheat, barley and millet, as was the case on the farm here considered, then the inventory values for these three crops must be transferred to the summary separately (page 87). Thus the inventory value of wheat at beginning of the year was \$575 and at the end of the year, \$320, the entries of which are found on page 87 in columns 1 and 4, respectively. Likewise the entries for barley are made; since there was no millet on hand at the beginning or end of the year there is nothing to transfer for this crop.

All other inventory values for the beginning of the year are totaled (column 1 opposite) and forwarded to page 87, column 1; likewise all other inventory values for the end of the year (opposite) are added together and forwarded to page 87, column 4.

## INVENTORY OF FEED, SEED AND SUPPLIES

	On hand at beginning of year			On hand at end of year		
	Amt.	Price	Value	Amt.	Price	Value
Wheat	250	\$ 2 30	\$ 575 00	200	\$ 1 60	\$ 320 00
Oats	700	.80	560 00	550	.31	170 50
Barley	800	1 40	1120 00			
Rye						
Flax				120	1 40	168 00
Corn						
Ground feed						
Grass seeds						
Alfalfa	4	15 00	60 00	15	10 00	150 00
Prairie hay						
Sweet clover hay						
Timothy						
Silage						
Corn fodder	6	8 00	48 00			
Cash on hand			200 00			200 00
Total			\$2563 00			\$1008 50
			Col. 1			Col. 2

**INVENTORY OF CATTLE.**

Inventories of cattle are made at the beginning and end of the year, the values being based on farm price. It is usually best to list each milk cow by name since cows frequently have a value above slaughter prices. Pure bred cattle should always be listed individually. Depreciation is allowable on pure bred stock based on a value representing the difference between slaughter prices and breeding value. Annual depreciation is determined on a basis of estimated life from prime (see page 10).

Ordinary young stock may be listed in groups according to age as indicated on the opposite page.

The totals of columns 1 and 2 are transferred to page 87, for the summary at the end of the year, for the tax report on the accrual basis.

**INVENTORY OF HORSES.**

Horses are listed in the inventory at the beginning and end of the year in a similar manner to that of other stock, except that depreciation of farm work animals is an allowable expense. Horses are considered at prime at about six years of age. The working life of horses in the northwest is from eight to twelve years (from prime) and depreciation is charged each year on the basis of the estimated working life.

The value of work horses is not changed from year to year with market prices; if that is done it is not possible to charge depreciation as above indicated. (See opposite page).

Young stock that is growing, appreciates and this increase in valuation is shown in the difference in inventories.

The totals of columns 1 and 2 are forwarded to page 87, columns 1 and 4 respectively, if income tax report is to be made on the accrual basis. If the report is to be made on the "cash" basis the loss, due to depreciation, which is not overcome by gains in the young stock, is determined by subtracting the total of column 2 from that of column 1. The amount is forwarded to page 89, line 11.

## SIMPLE FARM ACCOUNTS

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## INVENTORY OF CATTLE

Name or groups of cattle	Beginning year		End of year	
	Number	Value	Number	Value
Bessie	1	\$100 00	1	\$100 00
Mary	1	100 00	1	100 00
Flossie	1	75 00	1	100 00
Spot			1	100 00
Susie (bought)			1	125 00
2 yr. old heifers	2	120 00		
1 yr. old heifers			3	220 00
2 yr. old steers				
1 yr. old steers				
Calves	3	60 00	1	15 00
Bulls			1	50 00
Total		\$455 00		\$810 00
	Col. 1			Col. 2

## INVENTORY OF HORSES

Name or groups of animals	Beginning year		End of year	
	Number	Value	Number	Value
Ben	1	\$175 00	1	\$160 00
Bill	1	175 00	1	160 00
Fancy	1	150 00	1	137 50
Fannie	1	125 00	1	105 00
Charlie	1	140 00	1	120 00
Dobbin	1	125 00	1	112 50
Sal	1	75 00	1	65 00
Drivers	1	90 00	1	85 00
Colts	1	75 00	1	75 00
Stallions				
		\$1130 00		\$1020 00
	Col. 1			Col. 2

**INVENTORY OF HOGS.**

Hogs are listed at the beginning and end of the year and their value is based on farm price. No depreciation is allowable on hogs unless there is a special breeding value above market price. Such depreciation is determined in a similar manner as for cattle.

Hogs that are raised and sold or butchered within the year do not appear in the inventories in any manner.

The various classes of hogs, such as sows, shotes, etc., may be listed in groups where the stock is nearly of the same age and size.

The totals of columns 1 and 2 are forwarded to page 87, columns 1 and 4 respectively if income tax report is to be made on the accrual basis.

**INVENTORY OF SHEEP.**

Inventories of sheep are made in a similar manner to those of hogs. Ordinarily there will be no depreciation allowed on sheep.

**INVENTORY OF POULTRY.**

Inventories of various classes of poultry are made annually. In the case of chickens, roosters may be listed separately from the hens if desired, if they have a special value for breeding purposes.

Each class of poultry, such as chickens, turkeys, ducks, geese, guinea hens, etc., are listed separately and the values are based on market price less cost of delivering to market.

Any poultry raised and sold or slaughtered during the year does not appear in either inventory.

## SIMPLE FARM ACCOUNTS

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## INVENTORY OF HOGS

Groups of animals	Beginning year		End of year	
	Number	Value	Number	Value
Sows	1	\$ 40.00		
Boars				
Gilts				
Barrows				
Pigs				
Total		\$ 40.00		
	Col. 1			Col. 2

## INVENTORY OF SHEEP

	Beginning year		End of year	
	Number	Value	Number	Value
Ewes		\$		\$
Wethers				
Lambs				
Rams				
Total				
	Col. 1			Col. 2

## INVENTORY OF POULTRY

	Beginning year		End of year	
	Number	Value	Number	Value
Chickens	75	\$ 60.00	75	\$ 52.00
Turkeys	20	45.00	3	7.00
Ducks				
Geese				
Total		\$ 105.00		\$ 59.00
	Col. 1			Col. 2



**INCOME TAX SUMMARY.****Accrual Basis.**

At the end of the year's business the various accounts are added and the totals are transferred to this summary (page 87), if the income tax report is computed on the accrual or inventory basis. As previously pointed out (page 8) any summary of business that does not consider inventories is likely to give inaccurate results. Only farmers who keep records by a recognized method may make income tax reports on the accrual basis.

Wheat, barley and millet are indicated in italics; these correspond to the accounts on page 39. As previously pointed out the requirements are that the three principal cash crops be recorded in separate accounts. Consequently, the headings of these accounts must be written in, in accordance with the character of the crop sales. On another farm the leading cash crops might be oats, potatoes, and sweet clover, in which case these crops would become the accounts on page 39 and the corresponding crop names would appear in the summary (page 87).

It should be noted that the inventory values of the three leading cash crops are taken separately from the inventory for the beginning and end of the year (page 79). The values, \$575.00 and \$1120.00, (page 79) are added together (there being no millet listed in the inventory) and the sum, deducted from the total of column 1 (\$2,563), gives the amount, \$868, which is the inventory value of "other crops," to be entered in column 1, page 87. Likewise the transfers from column 2, page 79, are made; however, there are no values for barley and millet for the end of the year, so that \$320.00 is deducted from the total, \$1008.50, leaving the amount, \$688.50, as the amount of the "other crops" to be transferred to page 87, column 4.

The amount of "cash on hand" (page 79) is included with the value of "other crops" to be transferred.

To illustrate how the transfers of the various accounts are made, observe the line on which "cattle" is found (page 87). The references in the narrow columns refer to the pages and columns from which the totals are brought forward; "81-1" refers to page 81, column 1, for cattle, the total of which is brought to column 1, page 87; the reference "41-1" refers to page 41 column 1, from whence the total purchases are transferred to this summary; "41-2" refers to page 41, column 2, from whence the total sales of cattle are transferred and "81-2" refers to page 81, column 2, from whence the inventory value of cattle at the end of the year is derived.

"Those who reported on the accrual basis last year should fill out this form. The gross profits are found by adding to the inventory values of livestock and other products on hand at the end of the year (column 4), the amounts received from the sale of stock, and other products and miscellaneous receipts (column 3) during the year, and deducting from this sum the in-

ventory values of stock and products on hand at the beginning of the year (column 1) plus the cost of stock and products purchased during the year (column 2).”\*

The totals of the four columns are carried to the lines on the lower half of the page as follows:—the total of column 4 is entered on line 1; total of column 3 is entered on line 2; the total of column 1 is entered on line 4 and the total of column 2 is entered on line 5. The amounts entered on lines 1 and 2 are added, giving the total to be entered on line 3. The amounts entered on lines 4 and 5 are added, giving the total for line 6. The amount entered on line 6 is subtracted from the amount on line 3 and the result is “gross profit”, entered on line 7.

The entries to be made on lines 8 to 15 are found on the pages and in the columns indicated. A prerequisite of the accuracy of the entries is the correctness of the various accounts.

The entries on lines 8 to 15 are added and the result is entered on line 16. The amount of line 16 is subtracted from the entry on line 7; the result is “net farm profit” (line 17) for income tax reporting. After determining the net farm profit, forward this amount to page 93, line 6, where it is included in the summary for the study of the farm as a business.

From the “net farm profit” (line 17) may be deducted the family exemptions (\$1,000 for a single man, \$2,500 for a married man, living with his wife, and \$400 for each dependent child) and whatever remains is taxable income. If there is no income above family exemption, ordinarily the farmer will have no tax to pay, but if his gross profits (line 7) amount to \$5,000 or more, he must make a report.

Those who wish to report on the accrual basis but who reported on the “cash” basis previously, should fill out this form; however, they cannot enter as a credit on line 4 the total of column 1, unless the commodities reported in column 1 were actually bought, and provided they have not been charged as an expense in any previous year.

If the change from the “cash” basis of reporting to the accrual basis results in an abnormally large income for the year the change of method of reporting is made, adjustments may be made to January 1, 1917, on sheets obtainable from the Commissioner of Internal Revenue.

In the North Dakota Farmers’ Account Book there are two identical forms for this report, one of which may be torn out and attached to the income tax report in lieu of the “work sheet” that farmers ordinarily have to make out. The other form in the account book is retained for further reference and study.

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\* North Dakota Farmers’ Account Book, 1921.

## SIMPLE FARM ACCOUNTS

87

INCOME TAX SUMMARY  
(Accrual basis)

	Inventory at beginning year	Total Purchases	Total Sales	Inventory at end of year
	P-Col 1 Amount	P-Col 2 Amount	P-Col 3 Amount	P-Col 4 Amount
Wheat	79-1 \$ 575.00	\$	39-	\$ 2783.24
Barley	79-1 1120.00		39-	82.20
Millet	79-1		39-	36.00
Other Crops	79-1 868.00		39-	14.00
Cattle	81-1 455.00	41-1 175.00	41-2 48.48	81-2 810.00
Dairy Products			43-	271.44
Hogs	83-1 40.00	41-1	41-2	111.60
Horses	81-1 1130.00	45-1	45-2	81-2 1020.00
Sheep	83-1	45-1	45-2	83-2
Poultry	83-1 105.00	47-1	47-2 43.03	83-2 59.00
Eggs			47-	88.83
Misc. Receipts			49-	312.27
Total	\$ 4293.00	\$ 175.00	\$ 3791.09	\$ 2897.50
	Col. 1	Col. 2	Col. 3	Col. 4

1. Inventory of livestock, crops, etc., at end of year,  
(Column 4 above) \$2897.50
2. Sales of livestock, crops, etc., during the year,  
(Column 3 above) 3791.09
3. Total (Add amounts on line 1 & 2 above) \$6688.59
4. Inventory of livestock, crops, etc., at the beginning of the  
year, (Column 1 above) 4293.00
5. Cost of livestock, crops, etc., purchased during the year  
(Column 2 above) 175.00
6. Total (Add amounts on lines 4 & 5 above) \$6408.00
7. Gross profits (Subtract amount on line 6 from amount on  
line 3 above) \$2290.59
8. Expenses for feed bought (from page 51) 17.25
9. Expenses for hired labor (from page 53) 136.20
- 10.
11. Expenses, miscellaneous (from page 69) 924.09
12. Repairs on permanent improvements (from col. 2, page 67) 8.00
13. Repairs on machinery (from column 2, page 57) 160.73
14. Depreciation of farm property (from column 5, page 75) 55.00
15. Depreciation of farm machinery (from col. 5, page 77) 194.00
16. Total (add amounts on lines 8, 9, 10, 11, 12, 13, 14, 15) \$1495.28
17. Net farm profit (subtract amount on line 16 from that on  
line 7 above) \$ 725.32

**. INCOME TAX SUMMARY.****Cash Receipts and Disbursements Basis.**

The summary for reporting taxable income on the "cash" basis is made up in the same manner as the summary on the accrual basis except that no inventory values for the beginning or end of the year appear in this summary. Line 11 (opposite) shows an item that is not found in the summary on the accrual basis except as reflected in the inventories. To get the item, \$110.00, the difference in value of horses, (page 81) at the beginning and end of the year is found. If there is a considerable number of colts raised their increase in value may entirely offset losses on the older horses in which case there will be no charge or entry to be made on line 11.

A comparison of the net farm profit, \$2185.82, on the "cash" basis with that on the accrual basis, \$725.32, shows a difference of \$1460.50. It is obvious that this farmer did not make a profit of \$2185.82 because of the great difference in inventory value (page 87, columns 1 and 4) which in itself shows a loss of \$1395.50. The same farm business is summarized in both cases by different methods. Unless the loss of \$1395.50 is recognized a true statement of the year's business cannot be found.

Another year may show an increase in inventory value due to increased production or advancing prices and here again the real income or gain is not determined unless these values are included in the summary.

INCOME TAX SUMMARY  
(Cash receipts and expenses basis)

Item	P-Col.	Amount Received	P-Col.	Cost of Item if purchased
Cattle	41-2	\$ 48.48	41-1	
Dairy Products	43	271.44		
Hogs	41-2	111.60	41-1	
Horses	45-2		45-1	
Sheep	45-2		45-1	
Poultry	47-2	43.03	47-1	
Eggs	47	88.83		
<i>Wheat</i>	39	2783.24		
<i>Barley</i>	39	82.20		
<i>Millet</i>	39	36.00		
Other Crops	39	14.00		
Miscellaneous receipts	49	312.27		
<b>Total</b>		<b>\$3791.09</b>		
			Column 1	Column 2

1. Sales of livestock, crops, etc., during the year,  
(from column 1 above) \$3791.09
2. Cost of items sold if previously purchased,  
(from column 2 above)
3. Gross profits (subtract amount on line 2 from amount  
on line 1 above) \$3791.09
4. Expenses for feed purchased (from page 51) 17.25
5. Expenses for hired labor (from page 53) 136.20
6. Expense, miscellaneous (from page 69) 924.09
7. Repairs on permanent improvements (from page 67, column 2) 8.00
8. Repairs on machinery (from page 57, column 2) 160.73
9. Depreciation of farm property (from page 75, column 5) 55.00
10. Depreciation of farm machinery (from page 77, column 5) 194.00
11. Depreciation on work—and breeding—stock (from  
inventories, pages 81 and 83) 110.00
12. Total (add amounts on lines 4 to 11, inclusive) \$1605.27
13. Net farm profit (subtract amount on line 12 from that on  
line 3 above) \$2185.82



**A STUDY OF THE FARM BUSINESS.**

The best use that can be made of this summary (page 93) is to study the results of the farm operation for the year, to find out how much has been made to pay for the farmer's time and for the use of his invested capital. It is presented to assist in determining these two items and to point the way to improve the business.

In order to determine the amount of the investment it is necessary to bring together the totals of the various inventories and include the value of the real estate.

Line 1—In arriving at the value of land, including buildings, reference should be made to page 15 for a consideration of the elements that enter into land values. Any mortgage that may be carried on the property is disregarded in determining this valuation. This farm of 350 acres is valued at \$85.00 per acre or \$29,750.00 including the improvements.

Line 2—To determine the present value of machinery the total amount of depreciation is deducted from the original cost, the total of column 6 being deducted from the total of column 2 on page 77. This amounts to \$1137.10.

Line 3—The total value of all livestock at the beginning of the year is found by adding together the value of the various classes of stock in column 1, page 87. For this farm the amount is \$1,730.00.

Line 4—The value of feed, seed and supplies on hand at the beginning of the year is the total of column 1, page 79, and is \$2,563.00.

Line 5—The total investment is found by adding the totals of the above values, and amounts to \$35,180.10.

Line 6—The net farm profit is found on page 87, line 17 and amounts to \$725.32.

Line 7—If any interest has been paid on farm mortgages during the year the amounts paid are recorded on page 69. In this case there was no mortgage.

Line 8—If there has been any marked improvement in the farm property during the year, such as the addition of windbreaks, land clearing, removal of stones, terracing, etc., such improvements are estimated and included here. There was none on this farm.

Line 9—The value of food, fuel and house rent furnished to the family is found in the amount at the bottom of page 65. This is the total of the amount, less the amount deducted for hired labor, and is \$356.90.

Line 10—This is the total of the above credits including the net farm profit and is \$1082.22.

Line 11—The value of family labor is found on page 55.

Line 12—Occasionally there is a decrease in the physical valuation of

real estate due to excessive erosion, destruction of timber by storm, etc., although this is of infrequent occurrence in the Northwest. Any such loss that occurs is estimated and entered here.

Line 13—The cost of maintaining the dwelling house on the farm cannot be allowed as an expense for income tax purposes but is included in this summary. The depreciation of the dwelling is found in column 5 on page 75.

Line 14—Likewise repairs to the dwelling are recorded here, the various items of cost for this purpose being found in the household and personal account (page 73) under running expenses, when there are any such expenses.

Line 16—The difference between all expenses and receipts, including differences in inventories, is the amount that the farm operator actually receives for his labor and management and for the use of his capital. For the farm here considered the amount is \$876.22.

Line 17—Interest on the investment is allowed at the rate of 6 per cent. It may be claimed that this rate is too high or too low; this rate is merely suggested. The fact is that farmers generally make, on the average, only about 3½ per cent. on their investments. For this farm the investment is \$35,180.10 (line 5); interest on this investment at 6 per cent is \$2110.80.

Line 18—If the interest on the investment is deducted from the income for labor and investment the result is the labor earning of the operator. In the case here indicated the interest is greater than the income; in other words, the farmer received \$1234.58 less than nothing for his year's work.

Line 20—The value of the operator's labor, irrespective of what his actual income is, has been discussed elsewhere (page 22). This value is estimated and entered here; for this farmer it is \$1,200 per year.

Line 21—Where the value of the operator's labor is deducted from the income for labor and investment, the earnings on the investment are found. In the case of this record this return is less than nothing.

Line 22—When there are earnings on the investment, these are divided by the amount of the investment (line 5) and the result is percentage return on investment.

## A STUDY OF THE FARM BUSINESS

Investment in the farm business	Inventory beginning year
1. Land, including buildings	\$29750.00
2. Machinery (subtract total, column 6, from total, column 2, on page 77).	1137.10
3. Livestock, (add totals of column 1 on pages 81 and 83).	1730.00
4. Feed, seed and supplies (total of column 1, page 79)	2563.00
5. Total capital investment (add amounts of lines 1,2,3 & 4 above)	\$35180.10
6. Net farm profits (from line 17, page 87)	\$725.32
7. Interest paid on farm mortgages (from page 69)	
8. Increased value on account of development	
9. Value of food, fuel and house rent (from page 65)	356.90
10. Total (add amounts on lines 6, 7, 8 & 9)	1082.22
11. Value family labor (from page 55)	174.00
12. Decreased value of farm property	
13. Depreciation on dwelling (from column 5, page 75)	32.00
14. Cost of repairs to dwelling (from page 73)	
15. Total (add amounts on lines 11 to 14 inclusive)	206.00
16. Income for operator's labor and investment (subtract amount on line 15 from that on line 10)	876.22
17. Interest on investment @ 6% (investment is line 5)	2110.80
18. Labor earnings of operator (subtract amount of line 17 from that of line 16)	Loss
19. Income for operator's labor and investment, (line 16 above)	\$876.22
20. Value operator's labor (estimated)	1200.00
21. Income on investment (subtract amount line 20 from that of line 19)	Loss
22. Interest on investment (divide amount of line 21 by the amount of line 5 above)	Loss %

**SOME MEASURES OF FARM BUSINESS.**

It is desirable to have some standard by which any attainment may be measured and consequently the column "average for good farms" is shown on page 97. The figures indicated as measures in this column must be considered as applying only in a general way because conditions are variable and some special situation may upset a fair comparison. Where the usual or common prairie conditions prevail in the northwest the measures given are reasonably fair, representing just a little better than average conditions as determined by records of many farmers.

The average "size of farm" in North Dakota, for example, is 480 acres. In the Red River Valley the size is generally somewhat less than this and farther west the size (in acres) is somewhat larger. Farms are larger in the west because very much less business is done per acre; that is, expense of operation is less per acre and production is likewise less, and therefore, more land is required to provide the necessary income to support a family (see page 30).

The acreage in "crops" for the farm here considered is found on page 37, and compares with a considerably larger acreage where somewhat greater profits are made.

The "amount of labor" is found by adding the months of labor hired, (page 53), family labor (page 55) and the operator's labor for the year, which amounts to 15.4 months for the farm under consideration. This farm uses labor a little less efficiently than the average, since 24 months of labor are generally required to operate 400 acres of the usual crops.

The "number of work horses" on this farm is seven (page 81) while 10 horses are required for the larger farms.

The "number of milch cows" on the farm was three for most of the year (page 81). The income per cow, below, indicates that this enterprise should be increased, which was actually done toward the end of the year.

The "wheat yield per acre" is considerably below the average for good farms, being 10.5 bushels. Good farm practices do much to overcome drought and rust may largely be avoided by growing varieties that are highly resistant to this parasite. These are the two greatest causes of crop failure in the northwest.

Yields of oats and barley (page 37) are much below the average, being 14.5 bushels and 8.25 bushels per acre, respectively. Drought was the principal cause of these low yields.

The "flax yield per acre," on the other hand, was exceptionally good, due largely to seasonal conditions over which the farmer had little control. None but "wilt-resistant" varieties of flax should be grown.

Corn and potatoes were not produced on the farm. However, it might be inferred from the good yield of other feed crops that corn should be included in the cropping system. There is no doubt, whatsoever, but that corn is an excellent crop to put the land in good condition for succeeding grain crops.

The same is true of potatoes. Experience has shown, too, that a few acres of potatoes, produced consistently every year, are far more profitable acre for acre, than grain.

The "millet yield per acre" and also the yield of alfalfa (page 37) were exceptionally good, being far above the average.

The "income from stock" is found as follows:—add together the inventory values of all stock at the beginning of the year (page 87, column 1) and the purchases of stock (page 87, column 2); add together the inventory values of all stock at the end of the year (page 87, column 4) and the sales of stock and stock products (page 87, column 3); subtract the sum of the "beginning" inventories and purchases from the sum of the "end" inventories and sales; the result is "income from stock". In comparison with the number of productive stock on the farm, it is apparent that this part of the farm business was profitable.

The "cattle receipts per cow" are determined as follows:—add the value of cattle at the beginning of the year (\$455) to the purchases, (\$175); add the value of the cattle at the end of the year (\$810) and the sales of cattle (\$48.48) and sales of dairy products (\$271.44); the difference between these two sums is \$499.92, which, divided by the number of cows (3), shows the income per cow to be \$166.64. Where feed can be produced as above indicated and such an income can be made there is no doubt but that an increase in this enterprise is justified.

The income from the hogs, "hog receipts per sow," is found in the same manner as the cattle receipts per cow. The amount of business done with hogs was too small on which to base a conclusion. However, some hogs in connection with dairy cattle are generally more profitable than where the cattle are handled by themselves.

The "value of machinery per crop acre" is a measure of the operating and overhead efficiency of the farm. When the total of column 6 is deducted from the total of column 2 (page 77) and the result is divided by the number of crop acres (227) it is seen that the present value of machinery, based on cost prices, is \$5.01 for each acre in crops, which is somewhat higher than the average. This is due quite largely to the fact that the size of the farm is too small; a considerably increased acreage could be operated without increasing the amount of machinery in proportion.

The "annual farm cost of automobile" is found by adding the depreciation (page 77, column 5), interest on the present farm value of the car at eight per cent., cost of gasoline and oil and cost of repairs for farm use (page 59). Few cars are operated at an annual cost below that here indicated (\$178.57).

"Crop acres per horse" are found by dividing the number of crop acres (page 37) by the number of work horses. The result on this farm is 32.4

acres which is considerably less than the average for similar farms. There are too many horses on this farm, or the size of the farm should be increased by purchase or lease. If this is not possible a more intensive cropping system might be put into operation.

The "value of man labor per crop acre" is found by adding the value of hired labor, including board, (\$136.20), value of family labor \$(174) and the value of the work done by the farmer himself (not including management), based on "going wages" (\$900), and dividing the result by the number of crop acres (227). The result is \$5.33, which is slightly higher than the established average.

It should be remembered that machinery and hired labor were the highest in terms of money value in 1920 that they have ever been in the history of the country. Consequently, in comparing factors involving either of these items with standards of measurement, proper regard must be given to lower prices that may prevail.

## SOME MEASURES OF FARM BUSINESS

	This Farm	Average for good farms
Size of farm (acres)	350	480
Crops, including tame hay (acres)	227	400
Amount of labor, including operator (months)	15.4	24
Number of work horses	7	-
Number milch cows	3	5-10
Wheat yield per acre (bushels)	10.5	15
Oats yield per acre (bushels)	14.5	30
Barley yield per acre (bushels)	8.25	25
Flax yield per acre (bushels)	1.5	10
Corn yield per acre (bushels)	-	.55
Potato yield per acre (bushels)	-	100
Millet yield per acre (tons)	.3	.2
Other tame hay yield per acre (tons)	.3	1.5
Income from stock	\$547.88	\$1500.00
Cattle receipts per cow	\$166.64	\$ 150.00
Hog receipts per sow	\$ 71.60	\$ 50.00
Value machinery per crop acre	\$ 5.01	\$ 4.50
Annual farm cost of automobile	\$178.51	\$ 240.00
Number crop acres per horse	32.4	40
Value of man labor per crop acre	\$ 5.33	\$ 5.00

## TEACHERS' SUPPLEMENT

The following record of expenses and receipts consists of the cash transactions that have been encountered in the various accounts previously considered. These entries are here arranged in chronological order for classroom use in order that the work can be given in a manner similar to the way the transactions actually occur on the farm.

After the depreciation accounts of buildings and machinery are completed in the Farmers' Account Book, the records on pages 75 and 77 having been entered, the inventories for the **beginning of the year** are recorded. Then the cash transactions, following, are given to the pupils for each lesson, in quantities sufficient for them to enter in the proper account. After all the cash transactions have been recorded in the accounts, the inventories for **the end of the year** are entered. The various summaries are then made up, similar to those presented previously. The various measures of efficiency (page 95) are then calculated from the record that has been here presented. The pupils should be supplied with blank copies of the Farmers' Account Book for the practice work.

Following this practice the pupil is ready to begin the keeping of the farm record on his home farm, using the same procedure as in the practice work.

## CASH RECEIPTS AND EXPENSES.

DATE	ITEMS	EXPENSES	RECEIPTS
Jan. 5,	1 pr. shoes	4.00	
Jan. 5,	3 games rumm.	.30	
Jan. 5,	Candy and cigars	.35	
Jan. 5,	2 sacks flour	\$ 12.00	
Jan. 5,	20 pounds sugar	4.00	
Jan. 5,	6 pounds coffee	1.80	
Jan. 5,	6 qts. canned fruit	2.10	
Jan. 15,	Cinnamon, vanilla, cloves	.75	
Jan. 15,	Corn starch	.50	
Jan. 15,	Yeast	.20	
Jan. 31,	73 pounds butter (January 1—31)		\$ 35.55
Jan. 31,	16 doz. eggs		7.84
Feb. 29,	45 pounds butter (Feb. 1—29)		22.25
Feb. 29,	11 doz. eggs (Feb. 1—29)		5.72
Feb. 29,	Groceries (Feb. 1—29)	22.25	
Mch. 1,	Feed for poultry	3.25	
Mch. 10,	53 bu. wheat @ \$2.75		145.75
Mch. 10,	1 rooster		1.75
Mch. 10,	15 turkeys @ \$2.00		30.00
Mch. 10,	6 gal. gas for auto	1.92	
Mch. 10,	5 gal. oil for auto	4.50	
Mch. 10,	Taxes	123.29	
Mch. 15,	½-ton bran for cows	14.00	
Mch. 20,	1 spark plug	1.00	
Mch. 20,	1 tire	18.00	
Mch. 25,	8 gal. gas for auto	2.56	
Mch. 30,	Tightening rods (auto)	6.50	
Mch. 31,	23 pounds butter (Mch. 1—31)		11.15
Mch. 31,	5 doz. eggs (Mch. 1—31)		1.90
Mch. 31,	Groceries (Mch. 1—31)	21.65	
Apr. 1,	Sharpening plow lays	5.00	
Apr. 5,	1 teakettle	2.50	
Apr. 5,	1 ton coal	14.00	
Apr. 5,	Wash woman	5.00	
Apr. 5,	50 gal. gas for auto	15.00	
Apr. 16,	1 roll roofing	2.00	
Apr. 19,	Drill repairs	.25	
Apr. 19,	Post auger	2.50	
Apr. 30,	25 pounds butter (April 1—30)		12.00
Apr. 30,	10 pounds butter (trade for groceries)		5.00
Apr. 30,	Groceries (Apr. 1—30)	25.25	

DATE	ITEMS	EXPENSES	RECEIPTS
May 31,	15 pounds butter (May 1—31) -----		6.75
May 31,	17 doz. eggs (May 1—31) -----		6.29
May 31,	Groceries -----	24.80	
June 5,	Bolts and parts (auto) -----	1.50	
June 10,	Hay carrier ----- \$ 30.00		
June 15,	6 loads sand -----		\$ 6.00
June 15,	Road work -----		39.10
June 15,	Testing 3 cows -----	10.00	
June 15,	Phone rent, 1 year -----	18.00	
June 15,	Fire insurance -----	25.88	
June 15,	Millet seed -----	20.25	
June 15,	Freight on seed -----	.95	
June 19,	Tires set on wagon -----	6.00	
June 19,	Clevises and bolts -----	8.50	
June 25,	Scrap iron -----		10.00
June 25,	Repairs for rake -----	3.65	
June 25,	Parts for mower -----	7.20	
June 28,	John Olson, 8 days labor -----	26.00	
June 29,	Dakota Farmer, 5 yrs. subscription -----	3.00	
June 29,	Expenses to Fargo account farm business-----	17.00	
June 30,	20 pounds butter (June 1—30) -----		8.00
June 30,	20 doz. eggs (June 1—30) -----		7.20
July 1,	Repairs on cultivator -----	1.65	
July 5,	50 gal. gas -----	15.50	
July 5,	5 gal. oil -----	5.00	
July 31,	18 pounds butter (July 1—31) -----		8.64
July 31,	21½ doz. eggs (July 1—31) -----		8.60
July 31,	Groceries (July 1—31) -----	25.70	
Aug. 3,	Canvases for binder -----	30.05	
Aug. 10,	50 gals. gas for auto -----	15.50	
Aug. 15,	7 gal. gas for auto -----	2.31	
Aug. 31,	11 doz. eggs (Aug. 1—31) -----		4.95
Aug. 31,	Groceries (Aug. 1—31) -----	41.40	
Sept. 3,	Harness repair -----	19.75	
Sept. 3,	Repairs on grain tank -----	8.10	
Sept. 3,	65 bu. wheat @ \$2.30 -----		149.50
Sept. 3,	Evener -----	1.60	
Sept. 4,	135 bu. wheat @ \$2.25 -----		303.75
Sept. 6,	142 bu. wheat @ \$2.28 -----		323.76
Sept. 6,	Team and wagon threshing -----		78.00
Sept. 6,	Lumber for poultry house -----	149.00	

DATE	ITEMS	EXPENSES	RECEIPTS
Sept. 6.	Hardware for poultry house -----	15.00	
Sept. 6.	Farm Bureau membership -----	10.00	
Sept. 6.	Twine -----	106.00	
Sept. 6.	Thresh bill -----	525.00	
Sept. 7.	133 bu. wheat @ \$2.30 -----		305.99
Sept. 8.	145 bu. wheat @ \$2.28 -----		330.60
Sept. 9.	137½ bu. wheat @ \$2.24 -----		308.00
Sept. 10.	141 bu. wheat @ \$2.22 -----		313.02
Sept. 13.	135 bu. wheat @ \$2.23 -----		301.05
Sept. 14.	133 bu. wheat @ \$2.27 -----		301.91
Sept. 15.	75 bu. barley @ 60c -----		45.00
Sept. 15.	3 tons millet @ \$12. -----		36.00
Sept. 16.	60 bu. barley @ 62c -----		37.20
Sept. 16.	10 bu. flax @ \$1.40 -----		14.00
Sept. 17.	Geo. Jones, 18 days labor -----	102.20	
Sept. 18.	Church donation -----	10.00	
Sept. 30.	Political contribution -----	18.00	
Sept. 30.	280 qts. milk (Sept. 1-30) -----		28.00
Sept. 30.	23 doz. eggs -----		9.66
Sept. 30.	Groceries (Sept. 1-30) -----	26.50	
Oct. 1.	Interest on note -----	8.00	
Oct. 1.	Horseshoeing -----	10.00	
Oct. 6.	Lumber for repairs -----	6.00	
Oct. 7.	Pasturing 3 horses -----		12.00
Oct. 11.	Repairs on gas engine -----	3.68	
Oct. 11.	1 shovel -----	2.30	
Oct. 11.	1 hammer -----	1.25	
Oct. 15.	1 hide -----		3.67
Oct. 15.	Sharpening plow lays -----	4.50	
Oct. 31.	420 qts. milk (Oct. 1-31) -----		42.00
Oct. 31.	24 doz. eggs -----		12.00
Oct. 31.	Groceries (Oct. 1-31) -----	23.20	
Nov. 16.	5 hogs, 930 lbs. @ 30c -----		111.60
Nov. 20.	3 doz. chickens -----		11.28
Nov. 30.	515 qts. milk (Nov. 1-30) -----		51.50
Nov. 30.	21 doz. eggs -----		10.92
Nov. 30.	Groceries (Nov. 1-30) -----	22.30	
Dec. 1.	1 heifer (meat) -----		48.48
Dec. 2.	1 bull calf -----	50.00	
Dec. 2.	1 cow -----	125.00	
Dec. 10.	Light sleigh -----	25.00	
Dec. 10.	To John (cash) -----	25.00	
Dec. 10.	Phonograph records -----	3.00	

## SIMPLE FARM ACCOUNTS

DATE	ITEMS	EXPENSES	RECEIPTS
Dec. 15.	Hauling school bus, 3 mos.		\$150.00
Dec. 31.	Services on school board		13.50
Dec. 31.	406 qts. milk (Dec. 1—31)		40.60
Dec. 31.	25 doz. eggs (Dec. 1—31)		13.75
Dec. 31.	Groceries (Dec. 1—31)	21.75	

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